IN THE CIRCUIT COURT OF
THE 11TH JUDICIAL CIRCUIT
IN AND FOR DADE COUNTY, FLORIDA

GENERAL JURISDICTION DIVISION

MARIE J. FONTANA,

Plaintiff,

vs.

PHILIP MORRIS INCORPORATED, ("PHILIP MORRIS U.S.A."), R.J. REYNOLDS TOBACCO COMPANY, LORILLARD TOBACCO CO., and BROWN & WILLIAMSON TOBACCO CORP., Individually and as Successor to the AMERICAN TOBACCO COMPANY,

Defendants.

CASE NO. 00-1731 CA01

TRIAL

Volume 8

TRANSCRIPT OF PROCEEDINGS

in the above-styled cause before the Honorable Thomas S. Wilson, Jr., Circuit Judge, at the Dade County Courthouse, 73 W. Flagler Street, Miami, Florida, on Thursday, March 22, 2001, at 1:30 p.m.

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1 (THEREUPON, the following proceedings were held:)
2 THE COURT: Are we ready to proceed?
3 Okay. As soon as Todd tells me we have a jury,
4 we will get started up.
5 MR. UPSHAW: Your Honor, before we bring
6 the jury out, I understand that Mr. Hunter told
7 us prior to going to lunch he intended to call
8 at least two more flight attendants.
9 Obviously, we are getting to the point of
10 being cumulative here. We had one flight
11 attendant, Ms. Blissard, who gave us her life
12 story about how she was a flight attendant.
13 We adopt similar argument as we did
14 previously. Again, these fact witnesses add
15 nothing to the case of Ms. Fontana, as I
16 pointed out on her cross-examination,
17 Ms. Blissard's examination, that she didn't
18 even know Ms. Fontana; had not flown the same
19 flights or routes of Ms. Fontana; didn't even
20 fly international flights as a flight
21 attendant.
22 THE COURT: Well, she certainly did fly a
23 few international flights as a passenger and
24 has experience in that field, so.
25 MR. UPSHAW: Granted, but that means,

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1 then, Judge, we can bring in any passenger that
2 flew on an international flight at any time
3 while there was smoke?
4 THE COURT: Well, you know, if it gets too
5 cumulative, maybe I will consider it, but right
6 now I'm overruling your objection.
7 MR. UPSHAW: We will find out what
8 point --
9 THE COURT: Yes. It sort of varies
10 sometimes. As soon as Todd brings the jury --
11 if you want to bring in the witness, have her
12 sit in the corner and we will call her up.
13 Ready? Okay. We are ready.
14 Todd, bring the panel in.
15 A little premature.
16 MR. UPSHAW: Your Honor, while we are
17 waiting, I didn't get a chance to ask
18 Mr. McCarron or Mr. Hunter, do we have any
19 other exhibits other than the same chair as we
20 brought in here?
21 MR. HUNTER: For the --
22 MR. UPSHAW: For Ms. Chambers.
23 MR. HUNTER: No. For these two we have
24 none. For Dr. Irvin, we have some
25 demonstrative aids including the pig lung. I

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1 have the lung of a pig hanging from a frame and
2 it's attached to a pump that goes down the
3 central bronchus, and with the Court's
4 permission I will do the demonstration before
5 you before we bring in the jury, before the
6 Frye issues, where you can pump up this actual
7 lung.
8 The pig lung is almost identical to a
9 human lung. It will allow the witness to show
10 the jury the difference between restrictive
11 disease and obstructive disease.
12 MR. ENGRAM: Does it count whether this
13 pig has emphysema or COPD?
14 MR. HUNTER: No. This is a healthy pig.
15 MR. REILLY: I don't think that it is.
16 THE COURT: Yes. Todd, bring in the jury.
17 (The jurors entered the courtroom.)
18 THE COURT: Okay. Good afternoon, ladies
19 and gentlemen. Hope everybody had a good
20 lunch.
21 Mr. Hunter, are we ready to proceed?
22 MR. HUNTER: Yes.
23 THE COURT: Who is our next witness?
24 MR. GERSON: Olivia Chambers.
25 THE COURT: Ms. Chambers, come on up and

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1 have a seat and sit down, and I will swear you
2 in and get you in and out quickly.
3
4 Thereupon:
5 OLIVIA ROSIE CHAMBERS
6 been called as a witness, was duly sworn, examined,
7 and testified as follows:
8 THE COURT: Please state your full name,
9 spell your last name for our court reporter,
10 and give us your current address.
11 THE WITNESS: My name is Olivia Rosie
12 Chambers, C-H-A-M-B-E-R-S. My address is
13 [DELETED]
14
15 THE COURT: Thank you very much.
16 Your witness.
17 Speak up loud enough for all our jurors.
18 DIRECT EXAMINATION
19 BY MR. GERSON
20 Q. You live in California?
21 A. Yes, I do.
22 Q. Are you employed?
23 A. Yes, I am.
24 Q. What kind of work do you do?
25 A. I'm a flight attendant for American

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1 Airlines.

2 Q. And how long have you been a flight

3 attendant?

4 A. Thirty-four years.

5 Q. What year did that start?

6 A. 1967.

7 Q. And so you've been with the same company

8 all that time?

9 A. Yes.

10 Q. In addition to the salary that you

11 received, do you get some flight benefits that make

12 it easy for you to -- easier or cheaper for you to

13 travel than the average person?

14 A. Yes, I do.

15 Q. Now, over that time, tell the members of

16 the jury some of the aircraft that you have flown

17 on.

18 A. I have flown the Electra, the 727, the

19 707, the 747, 757, the DC10, MD11.

20 Q. Maybe I should have asked, are there any

21 that you haven't flown?

22 A. A couple.

23 Q. All right. And what's been your type of

24 routes that you have flown over the last 34 years?

25 A. For the first 18 or 19 years I flew

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1 domestically. The last 16 years I've been flying
2 international flights between Los Angeles -- right
3 now -- Los Angeles and Paris or Los Angeles and
4 London. In the past I flew Dallas to Honululu,
5 Dallas-Maui, Dallas-Frankfurt, Dallas-London.
6 That's it. And then I was based in Honululu for a
7 while, where I flew Honululu-Sidney,
8 Honululu-Oakland.
9 Q. And as you know, this is a case about
10 secondhand smoke exposure by a flight attendant
11 while working, so in that connection I want to ask
12 you how the international flights were different, if
13 they were, from the domestic flights?
14 A. Well, they were somewhat different in you
15 were on the airplane much longer, so you had smokers
16 smoking more cigarettes in that amount of time.
17 Passengers are nervous on airlines, and I think they
18 have a tendency to smoke more, and the longer the
19 trip, the more nervous they are and the more they
20 smoke.
21 Q. Well, we know from other witnesses that
22 have already testified, about ten years ago smoking
23 on domestic flights was banned completely. Do you
24 know when smoking on international flights
25 originating in the United States was banned?

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1 A. On international flights I believe it was
2 in 1997.
3 Q. So up until that time on both routes,
4 either going to the international city or coming
5 back to the United States, were people permitted to
6 smoke on the flights that you worked on?
7 A. Yes, they were.
8 Q. And how would you describe the condition
9 of the air on those flights during that period of
10 time.
11 A. In a word, it was awful. But you could --
12 if you can imagine the smog in Los Angeles, where
13 it's kind of hazy, then it's thicker at the top.
14 That's pretty much what the airlines looked like.
15 Where the passengers were sitting it wasn't quite as
16 hazy as it was up where we were walking around,
17 because the smoke would rise.
18 Q. So the closer you were to the roof of the
19 plane or the ceiling of the cabin, the more smoke?
20 A. Yes.
21 Q. Now, I've just asked you about the
22 international flights. There was a time when you
23 flew, as our client did, between 1972 and the first
24 ban in 1988 on domestic flights, correct?
25 A. Yes.

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1 Q. And during the time that smoking was
2 allowed on domestic flights, how did the air quality
3 compare to what you've just described for the
4 international flights?
5 A. I would say that the air quality was
6 probably somewhat better in that the airlines would
7 be on the ground between stops, you know, and so
8 everybody would get off the airplane.
9 The airplane would be open by catering, so
10 there would be more of a ventilation so everything
11 had a chance to really clear out. The flights were
12 shorter, so people weren't smoking as much. There
13 weren't as many people smoking at the same time.
14 Q. Well, was the smoke on the domestic
15 flights, during those years where there were no
16 restrictions on smoking, something that was
17 noticeable to you or something that created any
18 problems?
19 A. Oh, sure it was noticeable. I mean, it
20 was hazy, you know, but most of the time when I flew
21 it was before the nonsmoking sections came in, and
22 so the smoke was more dissipated throughout the
23 airplane.
24 Q. Now, once they implemented the first
25 restrictions, which provided for segregated sections

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1 for smokers and nonsmokers, how did that affect the
2 working conditions of the flight attendants?
3 A. Well, actually, I think it became worse
4 for the flight attendants.
5 Q. Why is that?
6 A. Well, many of the smokers did not want to
7 sit in the smoking section of the airplane, so they
8 would get seats in the nonsmoking section. And then
9 they would want to come back and they did come back
10 to the smoking section, and they would stand up in
11 the back of the airplane or the back of the smoking
12 section, whether it was first-class or coach, and
13 they would stand there and smoke.
14 Most of them would smoke more than one
15 cigarette at a time. They smoked two, three, four,
16 whatever, before going back to their seats, because
17 they'd have to get up every time they want a
18 cigarette and come back. So sometimes you would
19 have ten, 15 people back there smoking at one time.
20 Q. Were there always some people back in that
21 area smoking over the entire time of the flight when
22 smoking was permitted?
23 A. Absolutely. Yes.
24 Q. Now, how about the lavatories. There are
25 lavatories in the back of the plane, too. What do

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1 you remember about the smoking conditions around the
2 lavatory areas?
3 A. Well, that's usually where the passengers
4 would stand. Of course, the ashtrays would be full.
5 Sometimes they would be smoldering cigarettes.
6 There where -- we would have to actually go in and
7 pour water into the ashtrays to put them out before
8 we could even empty them. But they were full all
9 the time because there were so many people smoking
10 so often back there.
11 Q. You know, one thing I forgot to ask you
12 about the international flights is the 747 was
13 the -- probably the largest or one of the first
14 wide-bodied airplanes, perhaps the best known. And
15 I think that flight -- that plane was used a lot on
16 international routes; is that right?
17 A. Yes, by a lot of carriers. We used it on
18 international and we used it on domestic. When we
19 first got the 747 and the DC10, they had lounges in
20 the back of the airplane and the passenger -- in
21 fact, we even had a piano back there and it was much
22 like a bar atmosphere. Passengers would go back and
23 talk to each other and drink and smoke cigarettes
24 and, you know, it was almost a party atmosphere back
25 there.

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1 Q. And were the flight attendants exposed to
2 the air in that area?
3 A. We had to be. On all of our flights there
4 has to be a minimum of two flight attendants in the
5 back of the airplane at all times. A minimum.
6 Q. Now, were there any times when the flight
7 attendants would involve the pilots or the other
8 members of the crew in trying to improve the
9 conditions because they became so bad?
10 A. Yes. We would often call them and ask
11 them to turn the Seat Belt sign on so the smokers
12 would have to go back to their seats to help clear
13 the air out.
14 And if that doesn't work, we would ask
15 them to turn the No Smoking sign on. Most of them
16 would do that and leave it on for 15 minutes or so,
17 and then they would turn it back on so people could
18 start smoking again.
19 Q. Even when they did that, was there any
20 time at all during the flight, once the smoking
21 begun, when you would not feel and smell the heavy
22 cigarette smoke of haze in the air?
23 A. No.
24 Q. By the way, did you ever notice what the
25 brands of cigarettes were that the people were

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1 smoking on flights you worked on?
2 MR. ENGRAM: Objection, Your Honor.
3 MR. UPSHAW: Objection, Your Honor.
4 THE COURT: Overruled.
5 MR. ENGRAM: Irrelevant.
6 THE COURT: Overruled.
7 A. Probably most of the popular brands.
8 Marlboro was a big one, because a lot of people
9 seemed to smoke that. And the airlines used to give
10 that out on the airline to passengers years ago.
11 Winstons, Cools, Camels. Newport sometimes. But I
12 would say that Marlboro was probably one that I'd
13 see the most.
14 BY MR. GERSON
15 Q. Now, on a lot of the flights, particularly
16 the international flights, you would have layovers,
17 correct?
18 A. Yes.
19 Q. And on those flights you would bring a
20 little suitcase of your own with a change of clothes
21 and maybe another uniform and your personal grooming
22 things that you needed, right?
23 A. Yes.
24 Q. Where would those things be kept during
25 the flight?

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1 A. In the cabin. It depended on where the
2 closets were on that particular airplane.
3 Q. So this would be kept in the passenger
4 cabin as opposed to the luggage storage in the
5 belly of the plane where the passengers' suitcases
6 went?
7 A. Yes.
8 Q. And what, if anything, or tell the members
9 of the jury what, if anything, you noticed about
10 your personal possessions after having been on an
11 international flight?
12 A. Well, in particular, like garment bags, I
13 would have my garment bag in the closet, and I would
14 get to the hotel and unzip it, and I could smell the
15 smoke, the residue of the smoke, on my street
16 clothes.
17 Q. And did that happen every time that you
18 flew?
19 A. As far as I remember, yeah.
20 Q. Now, when you were a serving or when you
21 were doing something to attend the needs of one of
22 the passengers, how close would that put you in
23 proximity to lighted, burning cigarettes?
24 A. Oh, right there. Sometimes inches away
25 I'd say. Depending on what we were doing. If we

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1 were just standing, it would not be a few inches.
2 If we were bending over to serve them or pick
3 something up, it would be immediately in our faces.
4 Q. I would like to ask you to demonstrate
5 something. We had a demonstration yesterday, and I
6 would like to demonstrate something a little
7 different this time.
8 Roz, would you and Vivian come on up?
9 Steve, help me out with this.
10 Steve, why don't you take the first seat
11 there. And then if you girls would sit over there.
12 Olivia, come on down from the witness
13 stand and come on over here to where I am. What I
14 would like to do is to have the same orientation
15 that we had in yesterday's demonstration and have
16 you assume that that's the front of the plane and
17 this is the back of the plane and that we are
18 somewhere now in the smoking section, and you've got
19 three people seated in a row there. And Steve is
20 over there by the window. And then these two young
21 ladies are seated here in the center in the aisle
22 seat. And let me get this tray.
23 Steve, why don't you put up your tray
24 table for me, if would you.
25 Let me just put that down there.

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1 Now, let's assume for this demonstration
2 that Steve has just had dinner, and Steve, why don't
3 you kind of lean back and close your eyes.
4 Was that a situation that you would come
5 up or find yourself in very often where a passenger
6 who had dinner and then was asleep?
7 A. Sure.
8 Q. And if that was the situation, there were
9 two people that were smoking here, what would have
10 been the correct or the appropriate way for you to
11 remove the tray if the time came to remove the trays
12 or there was turbulence or some reason to do it?
13 A. (Indicating)
14 Q. Well, why wouldn't you just wake him up
15 and ask him to hand you the tray?
16 A. We don't do that. That's not our
17 procedure. It never has been. Even if he wasn't
18 asleep, we would not ask him to hand us a tray. We
19 would reach over and pick up the tray.
20 Q. Well, if these two ladies were awake and
21 were smoking their cigarettes, why wouldn't you ask
22 one of them to just reach over and hand you Steve's
23 tray?
24 A. It's never been our procedure to do that.
25 It has always been that the flight attendants serve

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1 and the flight attendants pick it up. It's not a
2 passenger's place to do that.
3 Q. Are you a smoker?
4 A. No.
5 Q. Have you ever been a smoker?
6 A. No.
7 Q. When you would lean over, as you just did
8 for us, to remove Steve's tray, how would you be
9 affected if one or two of the other seats had
10 somebody smoking a cigarette?
11 MR. UPSHAW: Objection. Relevancy.
12 THE COURT: Overruled.
13 A. Well, the smoke would be in my face,
14 whether they were blowing it in my face or streaming
15 up from the cigarettes, it would be in my eyes and
16 my nostrils, and sometimes I would cough and
17 sometimes we would try to get away from it. But it
18 was definitely in my face.
19 BY MR. GERSON
20 Q. And how many rows were there that you
21 would be serving as one stewardess of the meal
22 service on a 747 flight?
23 A. Twenty, 30. Maybe 30.
24 Q. So would it be common, when you were doing
25 that, to get smoke in your face in some number of

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1 those rows, or is that something that might just
2 happen in one?
3 MR. UPSHAW: Objection.
4 THE COURT: Overruled.
5 A. It would be impossible not to get smoke in
6 your face in any of the rows.
7 BY MR. GERSON
8 Q. Okay. You can take your seat back on the
9 witness stand, and Steve and Vivian.
10 Now, Olivia, did you personally suffer any
11 ill effect on your health from this exposure to
12 cigarette smoke?
13 A. Yes, I have. Many flight attendants have
14 respiratory problems because of it.
15 MR. UPSHAW: Objection, Your Honor. Move
16 to strike.
17 THE COURT: Overruled.
18 BY MR. GERSON
19 Q. Have you made a claim against the tobacco
20 companies that are the defendants in this case as a
21 result of your own smoke-caused illnesses?
22 A. Yes, I have.
23 MR. GERSON: I have no further questions.
24 THE COURT: Mr. Upshaw.
25 MR. UPSHAW: Your Honor.

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1 CROSS EXAMINATION

2 BY MR. UPSHAW

3 Q. Ms. Chambers, good afternoon.

4 A. Good afternoon.

5 Q. My name is Anthony Upshaw and I represent

6 one of the defendants, Brown & Williamson.

7 Ms. Chambers, you and I have never met

8 before, have we?

9 A. No, we haven't.

10 Q. We haven't had the opportunity to speak at

11 any time, have we?

12 A. No.

13 Q. I find it interesting that you were put

14 through your direct testimony by Mr. Gerson.

15 A. Yes.

16 Q. You had the opportunity to speak with

17 Mr. Gerson before you testified here today, correct?

18 A. Certainly.

19 Q. In fact, you spoke with Mr. Gerson on

20 several occasions, did you not?

21 A. Yes.

22 Q. Isn't it a fact, Ms. Chambers, that your

23 lawyer in the case against these defendants is

24 actually Mr. Hunter, isn't it?

25 A. Yes. I guess so.

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1 Q. You guess; you don't know who your lawyer
2 is in the suit you filed?
3 A. Yes. Well, he is, yes.
4 Q. Mr. Gerson didn't mention it, but you
5 worked for American Airlines?
6 A. I said that. I said --
7 Q. I'm sorry. I missed it.
8 A. Yes.
9 Q. Not the airline that of Ms. Fontana?
10 A. No.
11 Q. In fact, you know Ms. Fontana?
12 A. I do not know her.
13 Q. You have not met her, have you?
14 A. I have never met her.
15 Q. Yet here you are testifying on her behalf,
16 aren't you?
17 A. Yes, I am.
18 Q. Simply, Ms. Chambers, your lawsuit is
19 similar to Ms. Fontana's; is it not?
20 A. I believe so.
21 Q. And you're seeking to hold these same
22 companies responsible for what you claim is an
23 illness from your exposure to environmental tobacco
24 smoke?
25 A. Yes, I am.

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1 Q. Now, you're here to testify on behalf of
2 Ms. Fontana because you want her to win her case,
3 don't you?
4 A. Well, I certainly hope she does.
5 Q. Because if she wins her case, just like we
6 heard before, it helps your case, doesn't it?
7 A. I'm not sure. But that's not why I'm
8 here.
9 Q. You're here to tell us your story?
10 A. Yes, I am.
11 Q. Your story, and Ms. Fontana cannot tell
12 her story; is that what you're telling this jury?
13 A. Well, I assume she cannot tell hers. My
14 understanding is that she's seriously ill and unable
15 to.
16 Q. You're not telling Ms. Fontana's story,
17 are you, Ms. Chambers?
18 A. No, I'm not.
19 Q. You're telling your story?
20 A. That's correct.
21 Q. Your story has nothing to do with
22 Ms. Fontana's story, does it?
23 A. I don't know.
24 Q. Why are you here?
25 A. I'm here because Mr. Hunter asked me to

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1 testify about the smoking conditions on the airplane
2 because I firsthand know what smoking conditions are
3 because I was there.
4 Q. Okay. So you're here because Mr. Hunter
5 wanted you to testify for a woman you don't even
6 know?
7 A. Well, yes.
8 Q. Mr. Hunter called you and said,
9 "Ms. Chambers, I want you to come all the way from
10 California to testify for a woman you've never met"?
11 A. Well, yes.
12 Q. Did you discuss your testimony before
13 today with Alani Blissard, another flight attendant?
14 A. My testimony?
15 Q. Sure.
16 A. I discussed that I had to come here -- are
17 you talking specifically about Alani or are you
18 talking about any flight attendant?
19 Q. Let's talk about Ms. Blissard. You and
20 Ms. Blissard and Mr. Hunter all got together and
21 talked about what you're here to talk to this jury
22 about?
23 A. No. What I talked about with the jury, I
24 haven't talked to the jury.
25 Q. What you're going to talk to the jury

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1 about. You're talking to the jury now?
2 A. I understand that.
3 Q. Okay.
4 A. I talked to Mr. Hunter about what I was
5 going to say, and yes, I talked to Ms. Blissard
6 somewhat what I was going to say, yes.
7 Q. What she was going to say?
8 A. I knew that she had stories that varied
9 from mine about what was going on.
10 Q. I'm sorry. Are you done?
11 A. I think so.
12 Q. Okay. You got your stories all together?
13 A. I don't think that's putting it correctly,
14 we got our stories all together. That sounds
15 devious and that's not what happened.
16 Q. So you meant nothing devious about it;
17 just making sure everybody was on the same page
18 about the story they were going to tell?
19 A. No, not at all. That's incorrect.
20 Q. Tell me, how many times did you practice
21 this little demonstration with Mr. Gerson?
22 A. One time.
23 Q. Just one.
24 A. I've done it a thousand times on the
25 airplane. It doesn't take much practice.

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1 Q. I'm sure you have. So it wouldn't be
2 necessary for you, then, to practice it unless you
3 wanted to get it straight for the jury, right?
4 A. Well, I think I have it straight. I have
5 always had it straight. I've been flying for 34
6 years. I know how to do it.
7 Q. But these lawyers wanted you to practice
8 it before you came in here today?
9 A. Yes, they did.
10 Q. Did you practice this little cough you did
11 here, too, while you were leaning over?
12 A. No, I did not.
13 Q. I just wanted to make sure.
14 Now, you have never flown for TWA; is that
15 right?
16 A. That's correct.
17 Q. So you don't know TWA's procedures or
18 policies, do you, ma'am?
19 A. I do not.
20 Q. Do you know TWA's -- are you familiar with
21 Ms. Fontana's seniority, her status, when she was
22 flying?
23 A. No.
24 Q. You don't know what type of jobs she bid
25 on or how her bidding occurred when she was a flight

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1 attendant with TWA, do you?
2 A. No.
3 Q. Do you know what aircraft Ms. Fontana flew
4 on?
5 A. No. I assume she flew on several.
6 Q. Okay. Now, rather than you assume, tell
7 me what you know. Do you know which aircraft she
8 flew on?
9 A. No.
10 Q. You never flew on L1011s, did you?
11 A. No.
12 Q. So you couldn't tell me what the refresh
13 rate or how quickly the air was ventilated on an
14 L1011, could you?
15 A. No.
16 Q. Now, you're not an engineer, right?
17 A. No, I'm not.
18 Q. So you couldn't tell me, then, what the
19 refresh rate was on a 747 or a 707 or any other
20 aircraft?
21 A. No.
22 Q. Do you know how many hours Ms. Fontana
23 worked in a month?
24 A. No.
25 Q. Can you tell us anything about

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1 Ms. Fontana's case with regard to her flying
2 history?
3 A. No.
4 Q. Okay. When did you stop flying
5 domestically and start flying internationally?
6 A. I believe it was in 1983.
7 Q. '83?
8 A. Maybe '84.
9 Q. Okay. I'm not going to hold you to that.
10 '83 or '84?
11 A. Okay.
12 Q. And the ban on smoking on domestic
13 flights, that was 1990?
14 A. I believe so.
15 Q. And you said this smoke was horrible or
16 actually worse on international flights than it was
17 on domestic flights?
18 A. I believe so.
19 Q. You could have switched in 1990 or after
20 1990 from international back to domestic flights,
21 couldn't you?
22 A. I could have.
23 Q. And you would have avoided all about
24 cigarettes that was bothering you that was awful,
25 that was so harsh on those international flights,

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had you switched to domestic flights?

MR. GERSON: Your Honor, I object.

THE COURT: Sustain.

Ladies and gentlemen of the jury, it is not an issue at all in this case, as we said before, as to whether or not there's any fault on the part of the plaintiff in this case, or any other stewardess for that matter. It's not a fault of the airline. It's not a fault of the stewardess in any way, shape or form.

The only thing for your determination is whether or not the plaintiffs can prove their case by the greater weight of the evidence, as to whether involuntary smoking or secondhand smoke or ETS caused or contributed to her injury. That's the only issue.

You may proceed.

MR. REILLY: Your Honor, could we have a sidebar?

THE COURT: No, sir.

BY MR. UPSHAW

Q. Ms. Chambers, had you continued to fly domestically, your exposure to environmental tobacco smoke would have been less, would it not?

A. Maybe.

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1 Q. Okay. I didn't say you may know or not
2 know.
3 A. Well, I think it would make a difference.
4 Q. Okay. Where does the -- when a plane is
5 sitting on the jetway, either before you take off --
6 let's keep it at that, before you take off, where
7 does the air come from that's coming inside the
8 plane?
9 A. They have a PSU unit that pumps the air
10 conditioning in. The engines aren't on, so I assume
11 it comes from the APU unit or the outside.
12 Q. Okay. Why don't you explain for the jury
13 what you mean by the PSU?
14 A. It's an APU unit.
15 Q. Okay.
16 A. It's a ground system that they have. It's
17 a motorized ground system that they have that pumps
18 the air from the ground into the airplane for us,
19 and they have a little temperature gauge that tells
20 how much air -- not how much air is coming in, but
21 the temperature of the air coming in so that they
22 can monitor it.
23 Q. So that air -- I'm sorry. So that air is
24 pumped in from the outside; wherever the jet is
25 sitting the air is pumped in from outside?

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1 A. I assume so.
2 Q. You don't know?
3 A. No. I'm not familiar with how exactly
4 that works.
5 Q. You said something about a lounge on the
6 TWA 747s. Wasn't the lounge on the second deck?
7 A. The lounges were in the back of the
8 airplane and upstairs. The first-class lounge was
9 upstairs. The coach lounge was in the back of the
10 airplane.
11 Q. Okay.
12 MR. UPSHAW: Excuse me one second, Your
13 Honor.
14 THE COURT: Yes, sir.
15 MR. UPSHAW: I have no further questions.
16 THE COURT: Redirect.
17 REDIRECT EXAMINATION
18 BY MR. GERSON
19 Q. Olivia, have you ever testified in court
20 before a jury before?
21 A. No.
22 Q. Were you a little nervous about it?
23 A. Extremely nervous.
24 Q. Right after the lunch break I did take you
25 over and show you the seats and what we were going

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1 to ask you to do during your testimony?
2 A. Yes.
3 Q. Okay. Is that the only time that you
4 practiced this for court today?
5 A. Yes.
6 Q. Now, on cross-examination you were asked a
7 lot of questions about scientific measurements.
8 Using your own nose, did you get a chance to do your
9 own scientific measurements at the time that you
10 flew?
11 A. I'm sure it was more accurate than any
12 scientific measurements than they might have
13 statistics of.
14 Q. And you have already told us what your
15 results were?
16 A. Yes.
17 Q. And would you come all the way across the
18 country to come to this courtroom and talk to this
19 jury and tell them anything that wasn't the God's
20 honest truth?
21 MR. REILLY: Objection, Your Honor.
22 MR. UPSHAW: Objection, Your Honor. He
23 can't ask that.
24 THE COURT: Overruled. You can answer it.
25 A. No, I would not. And when I swear that

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1 I'm going to tell the truth, I'm telling the truth.
2 MR. UPSHAW: Your Honor, move to strike.
3 THE COURT: Denied.
4 A. I take that seriously.
5 MR. GERSON: That's all the questions that
6 I have.
7 THE COURT: Ms. Chambers, you may step
8 down.
9 THE WITNESS: Thank you.
10 THE COURT: Who is the next witness?
11 MR. HUNTER: We have Carolyn Hurley, would
12 be the next witness.
13 MR. UPSHAW: Your Honor, we make our
14 motion that we made previously.
15 THE COURT: We'll pick it up when we take
16 a break.
17 Ma'am, come up and have a seat here. As
18 soon as you get seated and comfortable, I will
19 swear you in.
20 Raise your right hand.
21 Thereupon:
22 CAROLYN H. HURLEY
23 been called as a witness, was duly sworn, examined,
24 and testified as follows:
25

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1 THE COURT: Please state your name and
2 spell your last name for the court reporter and
3 give us your current home address.
4 THE WITNESS: Carolyn H. Hurley. My home
5 [DELETED]
6
7 THE COURT: Thank, you ma'am.
8 You're witness.
9 MR. HUNTER: Thank you, Judge.
10 DIRECT EXAMINATION
11 BY MR. HUNTER
12 Q. Ms. Hurley, look at the jury. Keep your
13 voice up so that they can hear you.
14 Good afternoon. Could you tell us what
15 your present occupation is?
16 A. My present occupation is an administrative
17 assistant.
18 Q. And who do you work for?
19 A. SunTrust Bank.
20 Q. All right. I want to call your attention
21 back to the year 1972. Who did you work for then?
22 A. I worked for the Federal Government.
23 Q. Okay. And in '73?
24 A. I was working with Eastern.
25 Q. All right. Tell the ladies and gentlemen

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1 of the jury what you did for Eastern. Give us a
2 little history of your career with these people.
3 A. I was a flight attendant with Eastern for
4 19 years, and basically I was serving people and we
5 were in charge of emergency equipment and just
6 making sure that the people were comfortable.
7 Q. Okay. What kind of a -- where did you
8 travel to? What flights you did handle and what
9 type of planes did you fly on?
10 A. I flew the west coast to the islands, east
11 coast. The type of airplanes I flew were 757, 727s,
12 1011s, DC9s.
13 Q. All right. Did you fly before smoking was
14 banned on airlines?
15 A. Yes.
16 Q. Could you tell the jury in your own words
17 what it was -- what your observations were of the
18 cabin air inside the airplane on the planes that you
19 flew, and let me ask you to say, a long flight
20 across the country on, say, a 1011, what was the air
21 quality?
22 A. Mostly it was very poor. The air was
23 stale, and especially when there was smoking a lot,
24 a lot of times it would be hard to breathe, if you
25 were working within the area where there was a lot

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1 of smoking.

2 Q. In your job were you required to -- in

3 performing the duties of your occupation, were you

4 required to get close enough to people who were

5 smoking so that the actual sidestream of the tip of

6 the cigarette would go into your nose and would you

7 inhale it?

8 A. Yes, sir.

9 Q. Did you ever carry aboard personal

10 articles in a suitcase or have overnight trips?

11 A. Yes.

12 Q. And tell us, what would occur with regard

13 to your clothing after you transported on a smoking

14 flight?

15 A. Oh, your whole body, everything you had

16 smelled like cigarette smoke.

17 Q. Even if you carried it in an enclosed

18 suitcase?

19 A. Yes.

20 Q. Carolyn, when did you stop flying with

21 Eastern?

22 A. When Eastern Airlines demised in '91.

23 Q. Were you made ill and did you acquire

24 respiratory illnesses from your flight attendant

25 experience?

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1 A. Yes, I believe so.
2 Q. Have you filed a claim against the
3 Brown & Williamson company and R.J. Reynolds and
4 these tobacco defendants?
5 A. Yes.
6 Q. Do I represent you?
7 A. Yes.
8 MR. HUNTER: Thank you. I have no further
9 questions.
10 THE COURT: Cross.
11 CROSS EXAMINATION
12 BY MR. UPSHAW
13 Q. Ms. Hurley?
14 A. Yes.
15 Q. Good afternoon.
16 A. Good afternoon.
17 Q. My name is Anthony Upshaw. I represent
18 Brown & Williamson. Speaking on behalf of the rest
19 of the defendants, good afternoon.
20 Again, Ms. Hurley, we have not met?
21 A. No.
22 Q. Is that correct?
23 A. Correct.
24 Q. We have not had an opportunity to speak
25 before this time, have we?

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1 A. No, sir.
2 Q. You live in [DELETED] ?
3 A. Correct.
4 Q. Is that somewhere near [DELETED]
5 A. It's in [DELETED]
6 Q. It is?
7 A. Yes.
8 Q. It's a suburb of [DELETED]
9 A. Right.
10 Q. When did you come to Miami to testify?
11 A. I'm sorry?
12 Q. When did you get to Miami so that you
13 could testify?
14 A. Today. This morning.
15 Q. This morning?
16 A. Uh-huh.
17 Q. And how many times did you speak to
18 Mr. Hunter before you came down to testify?
19 A. Just once I think over the phone.
20 Q. Once over the phone?
21 A. Uh-huh.
22 Q. About your testimony today?
23 A. Well, it's about not today, not the case
24 today.
25 Q. About your own case?

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1 A. Correct.
2 Q. So you've never spoken to any of these
3 lawyers about what you're going to talk about today?
4 A. No, sir.
5 Q. Did you have an opportunity to speak with
6 the woman who just left about what you were going to
7 testify to, Ms. Chambers?
8 A. I'm sorry?
9 Q. Did you speak to Ms. Chambers about what
10 you were going to talk about?
11 A. No, sir.
12 Q. When you were just sitting in the hall
13 there and we came in, you didn't talk to her about
14 your testimony?
15 A. No, sir.
16 Q. Okay. You worked with Eastern Airlines
17 while you were flying?
18 A. Correct.
19 Q. Did you ever work with TWA?
20 A. No, sir.
21 Q. Okay. You don't even know Ms. Fontana?
22 A. No, sir.
23 Q. Okay. Do you know what route she flew on
24 at all?
25 A. No, sir.

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1 Q. Did you ever fly international flights?
2 A. I flew to the islands, if you consider
3 that international.
4 Q. Did Eastern have a separate division
5 between domestic and international?
6 A. Yes.
7 Q. Were you in the domestic or international?
8 A. Well, actually both.
9 Q. Okay. You mentioned east coast, west
10 coast and the islands, so the islands would have
11 been considered international flights?
12 A. Well, San Juan, Puerto Rico is considered
13 international.
14 Q. When was smoking banned, if you know, on
15 airlines?
16 A. I think it was around '98 -- I'm sorry,
17 '88, '89.
18 Q. Okay. '88, and smoking was banned totally
19 around '90; do you remember that?
20 A. Not really positive.
21 Q. Okay. Do you know anything about
22 Ms. Fontana's flying history?
23 A. No, sir.
24 Q. Do you know anything about Ms. Fontana's
25 exposure to secondhand smoke personally?

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1 A. Not her personally, no.
2 Q. Okay.
3 MR. UPSHAW: Your Honor, I have no further
4 questions.
5 THE COURT: Any redirect?
6 MR. HUNTER: No, I have no redirect, Your
7 Honor.
8 THE COURT: Ms. Hurley, thank you very
9 much. Have a good day.
10 THE WITNESS: Thank you.
11 THE COURT: Who is your next witness?
12 MR. HUNTER: Dr. Charles Irvin.
13 THE COURT: Ladies and gentlemen, I think
14 we are going to need to take a little bit of a
15 ten-minute break, maybe a little bit longer,
16 but a ten-minute break. We will be working,
17 but you are going to be able to relax a little
18 bit.
19 (The jurors exited the courtroom.)
20 THE COURT: Okay. Mr. Hunter.
21 MR. REILLY: Is the doctor in the room?
22 THE COURT: Pardon?
23 MR. REILLY: Dr. Irvin is outside,
24 correct?
25 MR. HUNTER: Yes.

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1 MR. REILLY: Your Honor, I don't know
2 whether or not plaintiff's counsel intends to
3 ask Dr. Irvin if his opinion of Ms. Fontana's
4 sarcoidosis was aggravated or progressed by
5 exposure to environmental tobacco smoke.
6 We've just had Dr. Foley, a medical
7 doctor, say that no one knows what causes it to
8 progress, so before I actually make this
9 motion, maybe I may not need to make it.
10 THE COURT: Okay.
11 MR. HUNTER: Yes, he is going to say that
12 exposure to environmental tobacco smoke, once a
13 person has sarcoidosis, hastens its
14 progression.
15 MR. REILLY: In that case, I will go ahead
16 with the motion, Your Honor.
17 THE COURT: Okay.
18 MR. REILLY: There are two bases for
19 Dr. Irvin not being permitted to make such
20 testimony in front of this jury. The first is
21 that it would be pure speculation on his part.
22 I don't know if you have this brief, Your
23 Honor.
24 THE COURT: I think you gave it to me. I
25 read it.

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1 MR. REILLY: Okay. Dr. Irvin's opinion
2 that ETS caused the progression of
3 Ms. Fontana's sarcoidosis is based on
4 speculation. He acknowledged that in his
5 deposition, and on Page 4 of our brief we quote
6 from the deposition, in which he said,
7 "Referring to her complaints of shortness of
8 breath and cough, I'm speculating that
9 environmental tobacco smoke may have caused or
10 contributed to her progression of her disease,
11 which is, in this case sarcoidosis."
12 So he has openly acknowledged that this is
13 speculation on his part.
14 Later in the deposition he admitted that
15 he is unaware of any theory that has been
16 generally accepted in the medical and
17 scientific community with respect to the
18 progression of sarcoidosis.
19 So, once again, he confirms the
20 speculative nature of his opinion.
21 And then he strikes the other cord, which
22 is that he cannot comply with Frye because he
23 cannot base his opinion -- did not demonstrate
24 that his opinions are based on reliable
25 scientific principles and methodology generally

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1 accepted in the scientific community, and
2 therefore, he doesn't meet the Frye test.
3 His testimony went on to say, "Well, as I
4 stated last time," this was in the second
5 deposition, "in reviewing some of the theories
6 about the cause of sarcoidosis, it seems
7 reasonable, at least from a scientific
8 plausibility point of view, that environmental
9 tobacco smoke could be the cause of her
10 fibrosis and worsening of the disease from a
11 theoretical point of view." That's exactly
12 what Frye doesn't permit.
13 He admitted that the theory that he
14 reviewed has been postulated in one textbook,
15 but admitted that it was not a generally
16 accepted theory and was only being put forward
17 by the author of this particular chapter of
18 that particular book.
19 He also admitted that he knows of no study
20 that establishes the validity of the theory.
21 He admitted that there was no
22 epidemiological study that demonstrated ETS
23 causes a progression or worsening of
24 sarcoidosis.
25 He also agreed that there is no test to

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1 predict disease progression for sarcoidosis
2 patients.
3 He admitted that the single paper that he
4 was relying on for his theory was the Henley
5 paper, which involved active smoking and not
6 ETS.
7 And he further admitted that a single
8 study, the Henley paper in particular, didn't
9 establish anything.
10 So for both the reasons, that he
11 acknowledged that this is a theory that he has,
12 that it is speculation, and that it is
13 absolutely not based on reliable scientific
14 principles or methodology that has been
15 generally accepted in the scientific community,
16 he cannot satisfy either the lack of
17 speculation nor can he satisfy Frye.
18 And we are not trying to prevent Dr. Irvin
19 from testifying in his entirety, although our
20 motion originally indicated that because he
21 isn't a physician, he shouldn't be able to
22 testify on diagnosis and causation, but,
23 clearly, whether or not environmental tobacco
24 smoke can aggravate sarcoidosis, especially in
25 the face of a medical doctor who just left this

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1 courtroom this morning who yesterday testified
2 that no one knows why Ms. Fontana's sarcoidosis
3 occurred or why Ms. Fontana's sarcoidosis
4 progressed, we shouldn't allow someone to come
5 in and speculate based on theories that have
6 not gained general acceptance in the medical
7 community or based on methodologies that have
8 not gained general acceptance in the medical
9 community.
10 Thank you, Your Honor.
11 THE COURT: Mr. Hunter.
12 MR. HUNTER: As this has already come up
13 once before -- and they have failed to read on
14 to the next page where the doctor states: "I
15 would state that I think there's a reasonable
16 scientific probability that environmental
17 tobacco smoke contributed to the progression of
18 her condition."
19 Now, Dr. Irvin --
20 THE COURT: And that condition was the
21 sarcoidosis that he is referring to?
22 MR. HUNTER: Right. Dr. Irvin, as the
23 Court will see, as I begin to examine him on
24 his credentials, trained for about 16 years at
25 the National Jewish Center for Immunology in

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1 Denver, which is probably the foremost center
2 in the United States for the study of
3 sarcoidosis.
4 He was the director of the pulmonary
5 function lab at that center. And although he
6 did not particularly specialize in the
7 treatment and diagnosis of sarcoidosis, he did
8 conduct pulmonary function studies on numerous
9 patients that were suffering from the disease
10 of sarcoid.
11 As he then transferred over to the
12 University of Vermont, he is now the director
13 of the lung center, and he is also a professor
14 of medicine at the University of Vermont. He
15 is a pulmonary physiologist.
16 A pulmonary physiologist, as he will
17 describe to the Court, is a scientist who
18 studies the physiology, the structure of the
19 lung, as it results -- or as it relates to the
20 function of the lung.
21 The first thing that the doctor will
22 demonstrate for the jury, and that I intend to
23 offer him to do, is an explanation to the jury
24 of the difference between restrictive lung
25 disease, which essentially relates to the

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1 lungs's ability to -- the capacity of the lung
2 to inhale air, as opposed to obstructive lung
3 disease which is the -- essentially the ability
4 of the lung to expel the air, the volume of air
5 that its been able to take in and expel it and
6 both -- and interrelationship between both
7 diseases.
8 As I think the Court is in a position to
9 observe at this point in the trial, a
10 restricted lung disease of sarcoidosis which is
11 progressing is -- makes it somewhat difficult
12 to also at the same time determine whether or
13 not there are two disease processes working at
14 the same time.
15 Essentially, the defense in this case is
16 that since the treating physicians failed to
17 note or observe an obstructive component in
18 this particular plaintiff's lung disease, that
19 it didn't exist.
20 Dr. Irvin will testify, based upon his
21 pulmonary function studies and also the very
22 important CT scan of December of 1996, that, in
23 fact, there were two disease processes at work,
24 and that the second disease process was an
25 obstructive process which developed

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1 emphysematous lesions in the lung, as it has
2 been described by Dr. Foley.
3 And this will also be confirmed by the
4 conversation with Dr. Petty, who he will also
5 testify to his -- concerning his qualifications
6 and who Dr. Petty is and how the reading
7 occurred.
8 I think it's important for me to point out
9 to the Court that the reading which occurred,
10 and I'm paraphrasing the deposition that was
11 taken last evening of Dr. Irvin, the reading
12 that occurred in Vermont, was Dr. Irvin said,
13 "I have a patient who is suffering from
14 sarcoidosis. She's 54 years of age, and here
15 is her CT scan of December of 1996," without
16 anything else. It was what's known in the
17 practice of this field of science as a blind
18 reading.
19 Dr. Petty -- and it's a custom that
20 emanates from Denver, where both Dr. Petty and
21 Dr. Irvin, although have come from different
22 institutions, and it's a custom there that
23 radiologically they will look at a film with no
24 information. And it's something that they all
25 believe is of particular significance when

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1 given no preliminary indication as to what's on
2 the film, two doctors can come up with the same
3 observation.
4 And Dr. Petty says, "This is a patient
5 with end-stage sarcoidosis. However, there's a
6 second disease process going on in my opinion
7 with this patient, and it's an airway disease
8 which is probably emphysema."
9 And based upon everything I've told you up
10 to this point, and based upon his particular
11 specialty as being a physiologist, it's
12 Dr. Irvin's opinion that, in fact, exposure to
13 environmental tobacco smoke not only caused
14 airway disease, but the exposure resulted in a
15 shift of an enzyme or a -- and I'm a little --
16 you're going to have to hear this as it comes.
17 But there's a biological shift in the
18 structures and the components -- microscopic
19 components of the lung when exposed to tobacco
20 smoke which caused, and the studies have
21 indicated this a patient who has severe
22 sarcoidosis, who is then exposed to
23 environmental tobacco smoke, it hastens the
24 progression of the disease.
25 I think that had this request for a Frye

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1 hearing been made earlier, the Court may be
2 inclined to taken testimony, and I would have
3 brought the doctor in for that, but as it is
4 being brought up now, in the middle of trial, I
5 would ask the Court to listen as I attempt to
6 qualify the witness and lay a proper predicate
7 and make a ruling concerning the admissibility
8 of the testimony from the witness as I develop
9 it before the jury.
10 THE COURT: Okay. I think that's what we
11 are going to do.
12 MR. REILLY: Your Honor, if I might --
13 THE COURT: Certainly.
14 MR. REILLY: -- respond.
15 Mr. Hunter did not say anything in
16 conflict with any of the criteria that I
17 enumerated that would prevent this witness from
18 testifying on an aggravation of the
19 sarcoidosis.
20 He did not indicate that Dr. Irvin has
21 not -- did not indicate that his opinion was
22 speculative. The fact that he says he
23 reasonably believes it or that it's based on a
24 reasonable probability does not take the
25 speculative nature out of it. He clearly

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1 indicated that in his deposition and he has not
2 withdrawn that statement.
3 Mr. Hunter just mentioned this theory that
4 he has that there is a shift of an enzyme that
5 he can't describe. That's simply a theory.
6 THE COURT: That's what Mr. Hunter can't
7 describe, so the record is clear.
8 MR. REILLY: Right. I presume that
9 Dr. Irvin can articulate it.
10 THE COURT: I would hope so.
11 MR. REILLY: But the point of the matter
12 is that he did not indicate that that theory
13 has gained general medical acceptance. He did
14 not indicate that it has gained the level of
15 acceptance in the medical community that will
16 satisfy Frye.
17 As a matter of fact, he didn't even
18 address the fact that every one of the
19 pulmonologists or medical doctors who was
20 listed and who have been deposed in this case
21 on the plaintiff's side have denied exactly
22 what this physiologist maintains he is going to
23 come testify about.
24 Dr. Breeden in his deposition said no one
25 knows what causes sarcoidosis to progress. He

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1 said, "I have no knowledge that cigarette smoke
2 causes sarcoidosis to progress."
3 You just heard the other medical doctor,
4 the radiologist, say, "No one knows what causes
5 sarcoidosis to progress. And I have no opinion
6 that environmental tobacco smoke or cigarette
7 smoke causes sarcoidosis to progress either in
8 general or in this person."
9 So I don't know what it is and Mr. Hunter
10 hasn't offered what it is that he would do in
11 order to qualify Dr. Irvin on this point during
12 the course of a preparation for asking for the
13 opinion.
14 He has not indicated that whatever this
15 study is -- and we know what this study is. It
16 is the Henley study, the one I referred to in
17 this motion. He said it doesn't prove
18 anything, and he acknowledged that it has not
19 gained general acceptance in the medical
20 community.
21 So unless Mr. Hunter can articulate how
22 he going to alter that landscape, either
23 there's some new studies that haven't been
24 uncovered yet or there's been general
25 acceptance in the medical community that

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1 Dr. Irvin now says there is and can
2 demonstrate, I don't know why we would go
3 through the process of letting him, in front of
4 this jury, attempt to make that case when he
5 can't make it now and he couldn't make it --
6 Mr. Hunter said, "Why are we doing this now?"
7 We are doing this now for two reasons.
8 The first one is, because we didn't get to
9 complete Dr. Irvin's deposition until way late;
10 and secondly, because Your Honor told us to
11 take it up today. We would have taken it up
12 whenever you wanted to take it up, but we take
13 it up today because this is as you scheduled
14 it, which is fine, this is when it should be
15 taken up, before the witness testifies, before
16 he gets on the stand and says something in
17 front of the jury that will cause irreparable
18 harm to the case.
19 THE COURT: Well, I'm going to exercise my
20 gatekeeping authority in a very conservative
21 fashion. I'm going to listen to the testimony
22 and see whether we have to strike it or not, or
23 allow the opinion to come in in the first
24 place.
25 MR. HUNTER: Judge, I would like to show

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1 you, outside the presence of the jury, this
2 lung demonstration that I intend to unveil, so
3 that if there's -- are you going to object to
4 this?
5 MR. ENGRAM: I haven't seen it yet.
6 THE COURT: Then let's show it right now.
7 MR. HUNTER: That's what I wanted to do.
8 MR. ENGRAM: Your Honor, I am going to
9 object to this stack of treatises. Rule 706
10 doesn't allow the use of authoritative
11 treatises by counsel in his case in chief with
12 an expert witness.
13 These, I note, have been turned so the
14 jury can view the titles but -- most of these
15 things are asthma treatises. We would object
16 to that because they are being offered to
17 bolster the testimony of the witness. They
18 constitute hearsay under Florida law.
19 MR. HUNTER: I think he is a little ahead
20 of himself. I haven't done anything with them
21 yet.
22 THE COURT: Why don't you take them off
23 the desk so he doesn't start worrying too much
24 about it.
25 MR. HUNTER: I do want to know if this

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1 witness has either written or contributed a
2 chapter in it.
3 THE COURT: I didn't see that you had to
4 put it out of arm's length. I want it off the
5 desk, out of that prominent place.
6 Turn the books around so their titles are
7 not -- you will be able to read them. Probably
8 put them on the sides so one side or the other
9 can read them if you wanted to pick them up in
10 a hurry.
11 MR. HUNTER: Your Honor, I can get the
12 witness in here and give you some testimony.
13 THE COURT: Okay. Bring the witness in.
14 Dr. Irvin, why don't you put your bag over
15 here. I don't think that you will need it for
16 this particular moment.
17 Raise your right hand.
18 Thereupon:
19 Charles G. Irvin, PhD
20 been called as a witness, was duly sworn, examined,
21 and testified as follows:
22 THE COURT: Please state your full name,
23 spell your last name for our court reporter,
24 and give us your current professional address.
25 THE WITNESS: My name is Charles G. Irvin,

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1 I-R-V-I-N, Ph.D. My professional address is
2 [DELETED]
3 THE COURT: Now, do you want to have the
4 demonstration right now?
5 MR. HUNTER: Yes.
6 VOIR DIRE EXAMINATION
7 BY MR. HUNTER
8 Q. Doctor, could you please step down. I
9 have the exhibit on this table, and I intend to
10 examine you concerning Marie Fontana's condition
11 physiologically of sarcoidosis, and which is, I'm
12 going to ask you if that's a restrictive disease?
13 A. It's a restrictive disease.
14 Q. Okay. And would emphysema or COPD or
15 chronic bronchitis be an obstructive disease?
16 A. It's termed an obstructive disease or
17 air-flow elimination.
18 Q. Okay. Now, would it assist you in
19 describing to the jury the difference between a
20 restrictive disease -- and for the record I'm now
21 inflating an exhibit which is a lung of a pig --
22 would it assist you in explaining the difference
23 between restriction and obstruction by the use of
24 this exhibit?
25 A. Yes, I think it would because it's visual

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1 instead of words, and most people learn better if
2 they see something, something tangible.
3 Q. And why does an exhibit help you to show
4 the difference between restriction and obstruction?
5 A. Well, because there are two very different
6 physiologic processes within the lung. One is --
7 MR. HUNTER: This is for the benefit of
8 the Court.
9 THE COURT: I can hear you.
10 A. One is the loss of lung volume so the lung
11 is smaller. That's the restriction. And
12 obstruction is the difficulty of which the air has
13 getting out of the lung. And you can do that by
14 demonstrating how a lung inflates and deflates, and
15 then by making a few changes in the lung and
16 demonstrating how you can use part of the lung and
17 it's effect on the size of the lung and how by
18 changing the size of the airway you change the
19 ability of air that can move in and out of the lung.
20 THE COURT: Any problem with that?
21 MR. ENGRAM: Your Honor, while this -- I
22 understand it to be a pig's lung; is that
23 correct?
24 THE WITNESS: That's what I understand it
25 to be. I haven't determined exactly the

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1 species. It's about the right size.
2 MR. ENGRAM: Your Honor, I object on the
3 ground it's not substantially similar. This is
4 not the way a person breathes. It's certainly
5 not the way a person expires air.
6 THE COURT: Okay. Could you respond to
7 that?
8 THE WITNESS: That's correct. It's not
9 the way that a normal person breathes because
10 you're providing positive pressure to the
11 airway as opposed to negative pressure around
12 the lung. That would be a much more difficult
13 simulation. However, it's also the way that
14 you do expire because expiration in most people
15 is passive. And that's what that lung was
16 doing, passively expiring.
17 MR. HUNTER: Is this substantially similar
18 in the demonstration that you would do for the
19 jury, is it substantially similar to the
20 process by which you're trying to explain to
21 them --
22 THE WITNESS: Well, it is in the sense
23 that it's something visual that they can see as
24 opposed to abstract concept.
25 MR. ENGRAM: The Court -- I think you

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1 already ruled about visuals or demonstrative
2 evidence earlier in the case, but be that as it
3 may, this witness said that he would use this
4 model to show evidence of restrictive disease
5 and obstructive disease. There's been no
6 showing or testimony that this lung has either
7 restrictive disease or obstructive disease, and
8 there's no way for him to use this model to
9 establish how restrictive disease affects the
10 normal function of a lung when compared to a
11 diseased lung. I mean, he hadn't said whether
12 this is healthy or diseased, but I ask counsel
13 whether this was a lung that has emphysema or
14 COPD, I assume that -- do pigs get sarcoidosis?
15 THE COURT: We are not going to have
16 cross-examination of this right now. If you
17 want to handle the witness you can
18 cross-examine him during the course of trial.
19 MR. HUNTER: Your Honor, I would add this.
20 A test for a demonstrative aid is whether it
21 will assist the witness in explaining --
22 THE COURT: I understand. I'm going to
23 cut you off. I'm going to allow it and you can
24 cross-examine him on the efficacy of his use of
25 this demonstrative aid which I have not stopped

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1 in any way, shape or form since the start of
2 the actual testimony.
3 MR. ENGRAM: Your Honor, just I might make
4 one more point. This model does not accurately
5 depict the way a lung is inspired nor does it
6 accurately depict the way of expiration and
7 therefore not substantially similar.
8 THE COURT: That's noted. Doctor, have a
9 seat right here now and I'm going to re-swear
10 you in when the jury comes in so they can see
11 it.
12 MR. REILLY: Your Honor, one short
13 question about the break. Are you going to
14 take a break before the end of the day?
15 THE COURT: I hope so.
16 MR. REILLY: Okay. Because if you weren't
17 going to take another one between now and the
18 end of the day I was going to ask to --
19 THE COURT: We are going to take one as
20 soon as this direct examination is over.
21 MR. REILLY: Okay.
22 THE COURT: Todd, bring the panel in.
23 MR. HUNTER: Judge I don't want to run
24 afoul of a ruling. I am going to go take the
25 book physically out --

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1 THE COURT: Yes. I didn't want to have it
2 stacked up there.
3 (The jurors entered the courtroom.)
4 THE COURT: Everybody have a seat, please.
5 Ladies and gentlemen of the jury, our next
6 witness is Dr. Charles Irvin.
7 Sir, raise your right hand.
8 Thereupon:
9 Charles G. Irvin
10 been called as a witness, was duly sworn, examined,
11 and testified as follows:
12 THE COURT: Please state your full name
13 and spell your last name for our court reporter
14 and give us your current professional address.
15 THE WITNESS: My name is Charles G. Irvin,
16 [DELETED]
17 THE COURT: Thank you, sir.
18 Your witness.
19 DIRECT EXAMINATION
20 BY MR. HUNTER
21 Q. Good afternoon.
22 A. Hi.
23 Q. Doctor, you are a scientist; is that a
24 correct word for what you are?
25 A. Yes, I am.

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1 Q. What type of scientist are you?
2 A. I'm a physiologist. I study the structure
3 and function of the lung.
4 Q. All right. Could you give the jury an
5 explanation of what is physiology?
6 A. Well, physiology is the science of
7 studying how the body works, how do we breathe, how
8 does our heart work, how does gas exchange work; all
9 the workings of the body sort of from a functional
10 point of view, whereas pathology, for instance, is
11 the study of changes in the structure of the fine
12 detail of the building blocks of the lung. I'm
13 interested in how it actually works.
14 Q. Now, do you specialize in the lung?
15 A. Yes, I do.
16 Q. All right. How did you get interested in
17 that field? Tell us from the beginning, where did
18 you begin your education and how did you get
19 educated in that subject?
20 A. Well, I was a graduate student at the
21 University of Wisconsin in about 1973, and at that
22 point in time I had to decide what field of
23 specialty in physiology I wanted to go into, whether
24 it was nerves or heart or whatever.
25 And I went to see two professors, one

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1 professor was a guy named Quill Murphy, who my
2 father knew, and he was a cardiologist; and another
3 fellow named Jerry Dempsey, who was interested in
4 respiration and high altitude climatization. And I
5 went to interview with both of them and I decided to
6 go with Dr. Dempsey, because first it was very
7 interesting what he was doing, and the second is
8 that I actually have asthma myself and so I was
9 interested in the lung and how it worked.
10 That's how I got interested in it
11 initially. I then did six years with Dr. Dempsey
12 working on experiments and writing a thesis, which
13 is what you do to get a Ph.D.
14 *Q.* Let me stop you and ask you this. What
15 was your graduate degree in?
16 *A.* Biology.
17 *Q.* Okay. Go ahead. You spent six years --
18 *A.* So you do six years. You spend about two
19 years taking course work and then about four years
20 doing experiments in the laboratory, and then you
21 write all this up into a big book and they give
22 you -- you take an examination, and if you do well,
23 you pass and you're awarded a Ph.D.
24 Now, my thesis was on the mechanical
25 functioning of the lung, in particular, small

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1 airways disease, that one sees with asthma and other
2 things. We are using forced oscillations. It's an
3 approach of making measurements in the lung that
4 allow us to tell how well the small airways of the
5 lung are.
6 And at the end of that time, what is
7 commonly done is you go and do a post-op, and that's
8 where you do a two-year -- in those days you did two
9 years at some other laboratory to get more
10 experience.
11 It would be the same as if I were a chef;
12 you know, you try, you go around and cook at several
13 different restaurants before you really go out and
14 set up your own restaurant.
15 So in this case I went to McGill at the
16 University of Montreal, with a guy named Peter
17 Macklem, who is a very famous pulmonary physiologist
18 physician, and spent two years there studying nerve
19 control of the lung muscle.
20 And at that time I was recruited by the
21 National Jewish Hospital in Denver by Reuben
22 Cherniack to be a scientist there, but also to help
23 him run a lung-function laboratory.
24 Q. Now, tell the ladies and gentlemen of the
25 jury about the National Jewish Center. Is it the

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1 National Jewish Center for the study of immunology
2 or immunological disease?
3 A. Well, it's interesting because they keep
4 changing their name every couples of years, and one
5 of the first things they do is change their name.
6 But in 1980, when I went there, it was called the
7 National Jewish Hospital in Denver and the National
8 Asthma Center.
9 And then over the years -- that's too
10 long, it's hard to say, so eventually it became the
11 National Jewish Respiratory and Immunologic
12 Respiratory Center, and then some other acronym, but
13 most people know it as National Jewish.
14 Q. How is National Jewish regarded in the
15 medical community concerning the area that you were
16 in, as well as the area of sarcoidosis?
17 A. Well, to answer the first part of your
18 question, National Jewish has been rated by US World
19 Report the Number 1 --
20 MR. ENGRAM: Objection, hearsay.
21 THE COURT: Overruled.
22 A. -- as the Number 1 institute for the study
23 of interstitial pulmonary disease and immunologic
24 disorders, as well as sarcoidosis is one of them.
25 It's considered a national referral center for that.

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1 So the worst cases, the most difficult
2 cases, patients who are looking for "what can you do
3 for me," they will refer them to the National Jewish
4 for evaluation and treatment.
5 Q. Now how many years were you at National
6 Jewish?
7 A. Eighteen.
8 Q. Okay. And give us an overview of what you
9 did while you were there.
10 A. Well, I pursued science. I was interested
11 in the inflammatory mechanisms that cause asthma.
12 And I started off as the assistant director of the
13 lung function lab, then I became the associate
14 director, and then for about five years I was the
15 medical director at the laboratories there.
16 Q. Now, in addition to your scientific work
17 at the National Jewish Center and your operating the
18 pulmonary function lab, and I will get to that in a
19 moment, did you write and publish in the literature?
20 A. Yeah. If you don't do that, you lose your
21 job pretty quickly in my business.
22 Q. All right.
23 A. So you have to. I mean, it's part of how
24 you get promoted from assistant professor to
25 associate processor to full processor.

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1 Q. And what would you do, would you conduct a
2 scientific study and write the results up?
3 A. That's right. So you would conduct an
4 experiment or you would make measurements on
5 patients, and you do analysis on it, draw graphs and
6 put together tables, and then you talk about the
7 results, talk about the implication of the results,
8 submit the paper to the journal. It's sent out
9 anonymously to reviewers, peer-reviewers, people of
10 similar knowledge and expertise.
11 They send it back to you and say, "Well,
12 isn't good enough. You've got to do some more," so
13 you write rebuttals, and it goes back and forth, and
14 then eventually the paper will be published in the
15 peer-reviewed literature.
16 Now, in addition to that, I wrote up
17 interesting cases that we saw -- they were coming
18 through the lungs function lab -- and I wrote
19 chapters in books and review articles and such like
20 that.
21 Q. Have you had people come through, during
22 the 18 years -- and I assume this may be a question
23 that I know the answer to -- but during the 18 years
24 you were at National Jewish and then the years you
25 were in charge of the pulmonary function lab, did

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1 you have patients with sarcoid come through the lab?
2 A. Oh, yes, many.
3 Q. All right. Now, let me ask you -- you
4 want to hand me a couple of these.
5 You mentioned chapters in books. I'm
6 showing you Principles and Practices of Pulmonary
7 Rehabilitation, Casaburi or --
8 A. Casaburi.
9 Q. Casaburi and Petty. What contribution did
10 you have with this?
11 A. I wrote a chapter with one of the Fellows,
12 Tom Corbridge, about the lung function of the
13 patient with chronic obstructive pulmonary disease.
14 Q. What about Asthma and Rhinitis, William
15 Busse and Stephen Holgate?
16 A. Holgate, yes, I wrote a chapter in that
17 edition on the lung function of patients with
18 asthma.
19 Q. All right. The role of inflammatory
20 processes in airway hyperresponsiveness?
21 A. Dr. Holgate conducted -- that's a
22 symposium that was held up here in Boca Raton. I
23 made a presentation and I participated in writing a
24 chapter again about inflammation and how it causes
25 inflammatory lung disease.

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1 Q. Is environmental tobacco smoke an
2 irritant, an inflammatory agent?
3 A. Yes, it is.
4 Q. Drugs for the Respiratory System, and this
5 is by Dr. Cherniack we mentioned?
6 A. That's correct. This was a book that
7 talks about the different drugs that are used to
8 treat pulmonary disease, and I wrote a chapter with
9 a colleague of mine about the use of
10 anticholinergics.
11 These are agents that are used in patients
12 with emphysema and chronic bronchitis.
13 Q. Okay. Is there a cure for emphysema?
14 A. No.
15 Q. Is coronary obstructive pulmonary disease
16 one of the diseases which is most often failed to be
17 diagnosed?
18 MR. ENGRAM: Your Honor, objection. Lack
19 of qualification.
20 THE COURT: Overruled. If he knows it, he
21 can answer.
22 A. Yes, it is. The most common way we use to
23 pick up abnormalities of the lung is through
24 spirometry or chest films, and by the time
25 spirometry is reduced to a point where it's abnormal

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1 in a cross sectional taking of that test or by the
2 time you see changes on the X-ray, the disease is
3 well advanced.
4 Q. So it would not be unusual if a doctor,
5 before they make the diagnosis of coronary
6 obstructive pulmonary disease, the disease has been
7 there for a while and progressed?
8 A. Absolutely.
9 MR. ENGRAM: Same objection, Your Honor.
10 THE COURT: Same ruling.
11 A. Absolutely.
12 BY MR. HUNTER
13 Q. Severe Asthma, Pathogenesis and Clinical
14 Management by Szfler and Leung?
15 A. Don Leung.
16 Q. Okay. What was your contribution to this?
17 A. I wrote a chapter with Dr. Cherniack and
18 Gary Larsen. We were writing a chapter about the
19 physiology of patients with real severe asthma, the
20 kind that will kill them eventually.
21 Q. What does that say?
22 A. I had a Fellow that was working with me.
23 He came from Finland, and that book is in Finnish,
24 and we wrote a chapter in there. I helped him write
25 it in English and then he translated; and it's about

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1 using a special device to perform lung function
2 testing, a device that I actually had a hand in
3 inventing.
4 Q. All right. What does it mean when a
5 doctor says, "that was a Fellow" or "he was a
6 Fellow"?
7 A. Well, in medical training you go through
8 four years of medical school and then you do about
9 two years of residency. Now, during the residency
10 period you're really starting to function as a real
11 doctor.
12 And then at the end of that -- in fact you
13 are a real doctor, but you're still learning. And
14 at the end of that three-year period or usually
15 typically three years, the doctor then decides to
16 specialize and he may become an allergist or
17 pediatric allergist or pulmonologist or
18 cardiologist. And at that point in time he enters a
19 specialized training program to become trained in
20 that specialty.
21 Now, the length of that varies, depending
22 on what specialty that he goes into. Pulmonary, as
23 an example, is typically three years, although the
24 program we had in Denver was four years long. So
25 during those four years, they are rotating the

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1 different hospitals, they are on different services,
2 and they are learning more and more about the lung
3 and treating the lung diseases, et cetera.
4 Q. Clinical Pulmonary Disease, and again, I
5 see Thomas L. Petty is one of the authors or one of
6 the editors of this book; and what was your
7 contribution?
8 A. Well, I wrote a chapter there with a
9 Fellow I had who was a pediatric pulmonologist, and
10 we wrote a very basic chapter about the lung, how it
11 works.
12 Q. And Aerosolized Drugs for the Respiratory
13 Tract with a guest editor, Dr. Rau?
14 A. Right. That's recent. We wrote a chapter
15 with one of my Fellows in Vermont. And he wrote a
16 chapter on methacholine challenges and challenges
17 used to diagnose asthma.
18 Q. Now methacholine means that you would
19 administer the drug of methacholine somehow to a
20 patient to see if that will make them have a
21 bronchospasm or as asthmatic attack?
22 A. That's right. It's not an asthmatic
23 attack. It causes a response in the lung. It
24 causes the airways to narrow, but normal people have
25 little, if any, reaction as a patient with asthma

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1 has a very violent reaction.

2 The airways close quite tightly, and we

3 use that to diagnose whether or not a patient does

4 or does not have asthma.

5 Q. Now, here is the Pulmonary Function

6 Laboratory Management and Practice Manual. It bears

7 the name of the American Thoracic Society, and

8 assistant editor is Charles G. Irvin. What is this

9 document?

10 A. That was an interesting project that we

11 did for the American Thoracic Society. I was on a

12 committee at that time, the Lab Proficiency

13 Committee, and we were trying to help people at

14 different hospitals do a better job of diagnosing

15 and treating.

16 And so what that is, it's a laboratory

17 manual that -- it's a cook book. It's how to do

18 these tests. And they are written in what is known

19 as boilerplate, so you put in the particular details

20 for your hospital, but about 9 percent of the

21 writing is done for you.

22 Q. Can you analyze pulmonary function tests

23 to determine in this case whether Marie Fontana has

24 not only sarcoidosis but also emphysema, coronary

25 obstructive pulmonary disease or bronchitis?

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1 A. I believe you can.
2 Q. Does environmental tobacco smoke, what I
3 call secondhand smoke, involuntary smoking, does
4 that cause disease in healthy nonsmokers?
5 MR. ENGRAM: Objection, Your Honor. Lack
6 of qualification, lack of foundation.
7 THE COURT: Overruled.
8 A. Based on my reading, yes.
9 MR. ENGRAM: Your Honor, did I get a
10 ruling?
11 THE COURT: Yes. Overruled.
12 MR. ENGRAM: Oh.
13 BY MR. HUNTER
14 Q. Now, as a Ph.D. but not a medical doctor,
15 do you have a clinical practice; I mean, do you have
16 patients?
17 A. No. Other than patients come and present
18 as part of experiments that we are doing.
19 Q. Okay.
20 A. Trials.
21 Q. And do you make recommendations to doctors
22 concerning the nature of a condition or the
23 existence or nonexistence of a disease?
24 A. Frequently.
25 Q. Can you give me some examples? In fact,

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1 where did you just come from?
2 A. From New Orleans.
3 Q. What were you doing there?
4 A. I was speaking at the American Academy of
5 Allergy, Asthma and Immunology.
6 Q. And were you giving them a presentation?
7 A. I gave three presentations. Sunday
8 morning I gave a presentation of how to do
9 spirometry, which is a simple lung function test.
10 On Tuesday morning at 6:30 I gave a talk on
11 measuring lung function in babies, toddlers and
12 infants. And Tuesday afternoon I gave a talk about
13 what the new advances in pulmonary physiology are
14 and how they affect how we think about the lung, and
15 how it works or doesn't work.
16 Q. And I have here, I guess, Volume II of
17 Asthma and Rhinitis, Allergy and Inflammation, and
18 Eosinophils in Allergy and Inflammation; what are
19 these books?
20 A. One of them is a second edition to the
21 other one, so we updated the same chapter. And the
22 other is another book on asthma, and I wrote another
23 chapter again on lung function in asthma.
24 One of the other books is a symposium --
25 actually, both books are symposia, where either

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1 myself or my colleagues presented scientific
2 evidence of how inflammation or this white blood
3 cell, known as eosinophil. It's one of the white
4 blood cells.
5 Q. All right. Doctor, have I asked you to
6 review the pulmonary function studies and the CT and
7 records pertaining to Marie Fontana?
8 A. Yes, you have.
9 Q. And as a pulmonary physiologist, are you
10 able to offer us opinion testimony that may assist
11 this jury in determining whether or not exposure to
12 secondhand smoke, involuntary smoking, aggravated an
13 existing condition in the lungs of Marie Fontana?
14 MR. ENGRAM: Objection. Lack of
15 qualification.
16 THE COURT: Overruled.
17 A. I think that exposure to cigarette
18 smoke --
19 BY MR. HUNTER
20 Q. Well, let me start you out with a
21 hypothetical before you go on.
22 A. All right.
23 Q. I want you to assume as true for the
24 purposes of my discussion with you that Marie
25 Fontana began flying on international flights in

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1 approximately 1972, and that she began to -- and she
2 continued to fly until 1996, December of that year;
3 that typically her flights would be long
4 transAtlantic flights, all of which were smoking
5 flights, and the number of smoking seats was 100 or
6 more or in that neighborhood or a lot more, but in
7 that general neighbor. And I want you to assume
8 that she was diagnosed, as you have understood from
9 the records, with sarcoidosis.
10 Do you understand those facts?
11 A. Yes, I do.
12 Q. And accept those to be true.
13 Now, continue in your answer that I
14 interrupted you with.
15 MR. ENGRAM: Your Honor, I object to the
16 hypothetical on the grounds that it misstates
17 facts in evidence. The facts are not in
18 evidence and will not be evidence in this case.
19 THE COURT: Overruled.
20 A. Well, I think that exposure to
21 environmental tobacco smoke, it has to be at work
22 because that's where she's getting exposed to it,
23 had three different effects on her lung and her
24 respiratory system.
25 The first of these is that it caused her

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1 to cough a lot and to have secretions, mucus
2 formation in her head and nose. There are many
3 reports in the record about post-nasal drip, about
4 cough.
5 When I spoke to her on the phone, I asked
6 her about the cough; was she coughing all the time;
7 no. She only --
8 MR. ENGRAM: Your Honor, objection.
9 Hearsay.
10 THE COURT: Sustained.
11 BY MR. HUNTER
12 Q. Doctor, were your discussions with her in
13 the nature of taking a history from her as you would
14 in order to render an opinion within the confines of
15 your field of science?
16 A. Yes.
17 MR. ENGRAM: Your Honor, there's been
18 no -- objection, Your Honor. There's been no
19 foundation laid so that this witness -- he
20 already testified that he didn't treat
21 patients.
22 THE COURT: He works with Fellows all the
23 time. Overruled.
24 BY MR. HUNTER
25 Q. Go on, Doctor.

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1 A. If you suspect a patient has asthma, you
2 want to show that the symptoms are fluctuating. Now
3 you see it; now you don't. And if you suspect that
4 the things at work are causing the problem, you want
5 to try to -- you try to elicit from the patient a
6 story that says, "Well, I'm having trouble at work
7 but not at home. I'm having trouble at work but not
8 during vacation, or during the weekend."
9 So I started by asking her, "Did you cough
10 all the time?"
11 And she says, "No."
12 And I said, "Well, when did you cough?"
13 And she said, "When I was flying."
14 I said, "When did it start?"
15 "About 15 minutes after the plane takes
16 off and it would continue at least an hour
17 afterwards."
18 And I said, "Would it get better on the
19 weekends?"
20 "Yes, it would."
21 I said, "Were you better when you laid
22 over in Europe as opposed to laying over in the
23 United States?"
24 "No. It was much worse in Europe."
25 I said, "Why do you think that was?"

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1 She said, "Well, because of the restaurant
2 and the smoking. There is a lot more smoking in
3 Europe than there is here."
4 So I was trying to see if her symptoms of
5 cough and secretions were associated with some
6 trigger, something in the workplace. And I
7 concluded from that questioning of her that there
8 was a clear association of her symptoms to things
9 that were going on at work.
10 Now, the second way that I think -- in
11 fact, I'm fairly sure that cigarette smoke exposure
12 has worsened her disease, and the reason --
13 MR. ENGRAM: Objection, Your Honor.
14 MR. REILLY: Objection, Your Honor.
15 THE COURT: Overruled.
16 MR. ENGRAM: Your Honor, may we approach?
17 THE COURT: Certainly.
18 (The following proceedings were had at
19 sidebar:)
20 MR. ENGRAM: Your Honor, once we get -- we
21 are getting into speculations and theories, the
22 witness says, "I'm fairly sure."
23 THE COURT: Well, we will let you take
24 care of this in cross-examination, but at this
25 point in time I'm not going to sustain the

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1 objection.
2 (The sidebar conference was concluded, and
3 the following proceedings were held in open
4 court:)
5 BY MR. HUNTER
6 Q. Do you remember where you were, or do you
7 need the court reporter to cue you back to what you
8 were saying?
9 A. No. I think I remember where I was.
10 Q. Okay. Go ahead.
11 A. Well, I thought at the time when I
12 reviewed the lungs functions that the lung functions
13 were quite severe, and in particular one of the
14 tests looked to be a lot worse than I recalled
15 patients with sarcoid having, and it was of sort of
16 a different kind of a finding than you normally find
17 in a patient with sarcoid.
18 So I began to do some literature searches
19 about association between cigarette smoking and
20 sarcoid like there is in some other lung diseases.
21 And as I did that literature search, I
22 came across several papers, but one in particular,
23 and it had been done by Dr. Cherniack who has the
24 office next to me, and I had forgotten completely
25 about it.

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1 Q. Let me stop you, before you get to that.
2 Have you ever studied, you yourself personally, have
3 you ever, in your training coming up as a scientist,
4 put your mind to the issue of what does secondhand
5 smoke do to living organisms? Have you ever
6 addressed that issue?
7 A. Yes. Three situations that I can think
8 of.
9 Q. Tell the jury that.
10 A. I can't remember the exact dates, but a
11 colleague of mine at the University of California,
12 Davis, called me up, I'm going to guess about ten
13 years ago, when he was applying to the California
14 funding agency that funded research into the effects
15 of tobacco, and he wanted to do a project and he
16 needed some advice because he was interested in the
17 interaction between tobacco and asthma. And he
18 wanted to have me help him with that.
19 So he wrote a grant; I read it and sent it
20 in. The grant wasn't funded because about that time
21 the California government collapsed, and they raided
22 the money and kept the government going with it.
23 And then about three years ago at National
24 Jewish, we received a large block grant from the
25 EPA, the Environmental Protection Agency, and we

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1 were asked in the institution to write a grant
2 request to get the money to study certain things.
3 And I decided what would be nice would be
4 to take the project that I had done with the Fellow
5 in Davis and rewrite it, except now we would study
6 mice because with mice we could do so many things
7 these days.
8 And I contacted another colleague in
9 Albuquerque, who is an expert in exposing animals to
10 smoke. And he agreed to be a consultant and to help
11 me with it, and I wrote a proposal to a committee,
12 and they brought in experts from outside to judge
13 which of the proposals were the best, because there
14 was only so much money.
15 And my project was chosen as the best.
16 And what I was going to do was look at the
17 interaction between environmental tobacco smoke and
18 the exposure to allergens that then go on to cause
19 asthma, with the idea that we would see scientific
20 proof that there is an interaction that things would
21 get worse, and then if that's true, figure out how
22 that actually happens.
23 So in doing that grant, I searched the
24 literature, talked to experts, formed some opinions.
25 Q. What were you actually going to do, were

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1 you going to put mice in a test tube and --
2 A. Right.
3 Q. -- and expose them to smoke?
4 A. That's exactly what we were going to do.
5 We were going to put mice in exposure chambers down
6 at the Loveliss Toxicology Institute in
7 Albuquerque, because they had the skills and
8 expertise to do this.
9 And then ship the mice to Denver to study,
10 or if that doesn't work out, we would fly down to
11 Albuquerque, and actually do the experiments down
12 there.
13 Q. What is the difference between mainstream
14 smoke, which the smoker inhales into their lungs,
15 and the smoke which comes off the burning tip of the
16 cigarette?
17 A. Well, based on my reading --
18 MR. ENGRAM: Your Honor, objection.
19 Hearsay.
20 THE COURT: Overruled.
21 A. There's quite a lot of differences. When
22 you're sucking on a cigarette, you burn the end of
23 the cigarette quite hot, and of course, you suck the
24 smoke through the tobacco and through the filter.
25 And so the nature of the things that are

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1 coming out of the end of the cigarette are quite
2 different than if a cigarette is sitting here in an
3 ashtray sort of moldering away.
4 And I concluded from reading the
5 literature that, in fact, that kind of smoke is
6 worse in many regards because, for instance, ammonia
7 concentrations are 100-fold higher in a smoldering
8 cigarette than in an actively smoked cigarette.
9 MR. ENGRAM: Your Honor, I object and move
10 to strike the witness's testimony. There's
11 been no foundation or qualification laid to
12 establish that this witness has any experience
13 in chemistry or composition, and is contrary to
14 his testimony in deposition.
15 THE COURT: Denied.
16 BY MR. HUNTER
17 *Q.* What are some of the things that are in
18 tobacco smoke?
19 *A.* There's a lot of stuff in it.
20 MR. ENGRAM: Same objection.
21 THE COURT: Same ruling.
22 *A.* There are thousands of chemicals. There
23 are some really surprising ones, like formaldehyde,
24 ammonia, a chemical known as alkaline that a friend
25 of mine at Cincinnati was using to create an asthma

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1 model in rats, I recall.
2 There's an interesting gas that we now
3 know a lot about called nitric oxide. It's a
4 particularly reactive gas, and in the presence of
5 inflammatory cells of super oxides and all other
6 forms, chemicals that are terribly toxic to the
7 lung.
8 So, I mean, those are just for starters,
9 and it goes on and on, and I'm sure there's a lot of
10 these chemicals we don't know very much at all
11 about.
12 BY MR. HUNTER
13 Q. How about things that we do know such as
14 we know there is nicotine?
15 A. Right.
16 MR. ENGRAM: Your Honor, objection.
17 Leading.
18 THE COURT: Sustained.
19 BY MR. HUNTER
20 Q. Is there arsonic in cigarettes?
21 MR. ENGRAM: Objection. Leading.
22 THE COURT: No, overruled.
23 A. Yes.
24 BY MR. HUNTER
25 Q. Are there radioactive chemicals?

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1 A. Yes.
2 MR. ENGRAM: Same objection, Your Honor.
3 There is nothing in this witness's disclosure
4 or his testimony --
5 THE COURT: Same ruling.
6 BY MR. HUNTER
7 Q. Doctor, I'm asking you these questions for
8 you to advise the jury of some of the elements that
9 are in tobacco smoke.
10 Are you relying upon literature which is
11 accepted in the medical community for your answers
12 that you're giving?
13 A. Yes. There are articles published in the
14 peer-reviewed literature, in the case of original
15 studies, and there are also articles that have been
16 published in supplements or as book chapters where
17 they are being reviewed in some form or another.
18 Q. And did I provide to you also a list of
19 chemicals that were studied by the cigarette
20 companies themselves?
21 A. Right. It was a book -- it was a Xerox of
22 a book that's about that thick that was published by
23 the Philip Morris company in 1967.
24 Q. Okay.
25 A. And I went through about 100 pages of

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1 organic chemicals and there are probably about 1,000
2 of them.
3 Q. And an organic chemical is different --
4 what are you telling us?
5 A. There are organic and inorganic, they have
6 carbon or not have carbon.
7 Q. You'll have to excuse me. What's that
8 mean?
9 A. Classifications of chemicals. The ones
10 that have carbon in them are called organic and the
11 ones that aren't are inorganic.
12 Q. What is arsonic?
13 A. That is an inorganic chemical.
14 Q. A lot of those chemicals are poison, am I
15 correct?
16 MR. ENGRAM: Your Honor, objection. Lack
17 of qualification. This witness has not been
18 qualified as a chemist or toxicologist.
19 THE COURT: Let's get more back on the
20 subject. Sustained.
21 BY MR. HUNTER
22 Q. I had asked you about the grant that you
23 were preparing in order to study the exposure of
24 mice to environmental tobacco smoke, and I had
25 interrupted you on the subject that I was talking

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1 about, which was the disease in Marie Fontana's
2 lungs.
3 What is sarcoidosis, a restrictive disease
4 or an obstructive disease?
5 A. It's a restrictive disease.
6 Q. Is emphysema, COPD or coronary obstructive
7 pulmonary disease or bronchitis, is that a
8 restrictive disease or obstructive disease?
9 A. It's classified as an obstructive disease.
10 Q. All right, now if I were to ask you to
11 explain to the jury the difference between a
12 restrictive disease and an obstructive disease,
13 would it assist you if you were able to
14 demonstrate -- use in explaining your testimony the
15 lung of an animal which we could inflate and
16 deflate?
17 A. I think it would because it's visual. You
18 can see it as opposed to me sort of saying words.
19 Q. All right. Is it your opinion -- do you
20 have an opinion as to whether Marie Fontana suffers
21 from both a restrictive disease, sarcoidosis, and
22 obstructive disease?
23 A. It's my opinion that Ms. Fontana has a
24 restrictive disease and she has an obstructive
25 disease.

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1 MR. HUNTER: All right, Your Honor, with
2 the Court's permission?
3 THE COURT: Go right ahead.
4 BY MR. HUNTER
5 Q. I would like to make a demonstration. And
6 so that the jury is not surprised by this, Doctor,
7 explain what they are about to see so that it's not
8 offensive to them or -- I don't want them to be
9 upset by this.
10 A. Well, the demonstration is with a pig lung
11 and I've done this several times in the past. My
12 wife used to be a teacher and she invited me to come
13 to the school and to show the school kids about the
14 lung and how it works.
15 And so I would go to the slaughter house
16 and get a pig lung that had just been disassembled
17 that morning, and would take it to school and
18 demonstrate to the children, and I also did this for
19 the respiratory therapist. And you can just show
20 the structure of the lung and we can actually
21 demonstrate a lot about how the lung works.
22 Q. This is a demonstration that school
23 children have seen?
24 A. I've done this demonstration or something
25 very similar to this with middle school children. I

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1 don't think that I'd do this in elementary. They
2 are a little young for that.
3 Q. And that doesn't mean that anyone has
4 sacrificed an animal. This is a lung which was
5 obtained during the course of making food for people
6 to eat?
7 A. That's right. Because in this country we
8 throw those parts away.
9 Q. All right. Could you step down and I'm
10 going to take off this.
11 A. This is a lung that's been removed from a
12 pig. And it's as you would see it in a pig or a
13 human, that in the absence of the chest wall it
14 collapses. And, in fact, if you were not careful,
15 you would probably misidentify it as a spleen. I
16 got that wrong on my comparative anatomy test.
17 This is the trachea. This is the main
18 airway by which air goes into the lung. And so
19 these are the airways. The conduits. And they are
20 constructed with cartilage around them to keep it
21 from collapsing.
22 Now, this part of the lung is the
23 bronchiole or the alveoli. They are tiny. You
24 can't see them. There are millions and millions of
25 them. But the lung itself is quite elastic, so that

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1 when it's inflated it expands.
2 Q. Now, before we do that, I want to -- the
3 jury has seen in this trial an anatomical drawing --
4 and Phil, give me the airways as well.
5 A. You can see the trachea here. Here is the
6 voice box, the trachea, and it splits into the two
7 main bronchi or the main stem bronchi into the left
8 and right lung.
9 Q. All right. And the jury has seen --
10 A. Ah, a Frank Netter, is he a very famous
11 artist. As you get down into the lung and at that
12 level, we are now talking about just a little bit
13 bigger than the size of a red blood cell, so it's
14 quite tiny. This is called the acinus of the lung
15 and this is the main gas exchange unit in the lung.
16 So this is where the actual process of
17 oxygen coming into the body and CO2 leaving the body
18 occurs, and that's what the lung is all for.
19 Q. All right. I want to demonstrate to the
20 jury now physically, so they can see it, the
21 difference between a restrictive disease such as the
22 sarcoidosis, and let me stop and ask you this. Does
23 medical science know what causes sarcoidosis?
24 A. No. We have a lot of suspicions about it,
25 but no one knows the precise cause of sarcoidosis.

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1 Q. Okay. I want --
2 A. At least nobody I know.
3 Q. I want the jury to see if you can explain
4 to them, through the use of this, the difference
5 between the restrictive disease such as sarcoidosis,
6 and an obstructive disease, that which would be
7 being an involuntary smoker subjected to secondhand
8 smoke for 20 years' duration?
9 A. Okay.
10 Q. What do you want me to do here with this?
11 A. I want you to pump up the lung, and we are
12 going to inflate it. This is not how you breathe
13 because how you breathe is your chest moves.
14 I don't know if you have ever taken a toy
15 balloon, put it in your mouth, suck on it, and feel
16 it, blow up in your mouth. That's how you actually
17 breathe. Your chest expands and creates negative
18 pressure around the lung and then expands.
19 This is how we treat patients who have
20 respiratory failure, put them on a mechanical pump
21 and inflate the lung that way, but it's essentially
22 the same mechanically.
23 So if you inflate that and take several
24 breaths, you can see how it grows. And all the
25 little alveoli are inflating and getting bigger and

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1 bigger.

2 Now, if you release that, Mr. Hunter, the

3 lung now starts to expire, and this is actually how

4 we do it during expiration. It's a passive process,

5 and over a few seconds, about five or ten seconds,

6 the lung deflates and that's what happens during a

7 normal breath.

8 Now, in this state the lung is at well

9 below residual volume. Our lungs actually don't go

10 to a volume quite this low. And when it was fully

11 inflated, that's called total lung capacity.

12 Now, we can simulate having restriction if

13 I just -- there we go. I'm going to close off that

14 main stem bronchus. Okay.

15 Now blow it up -- whoops. A plumbing

16 problem. Now blow it up. And you can see only one

17 of the lungs inflates. Okay.

18 All right. Let that deflate.

19 Restriction is defined simply as a process

20 in the lung that makes it smaller; it's restricted.

21 Now, in this case I eliminated one lung.

22 It would be the same as somebody performed surgery

23 on a patient and took out the lung; you would have a

24 restriction.

25 This disease, sarcoidosis, you have

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1 inflammatory granuloma, which are just clusters of
2 cells in the lung, and they take up the space of the
3 lung. They fill it up. They don't fill it up just
4 one spot but all throughout the lung, and it's the
5 same thing as if I removed half of the lung, and in
6 the case of this particular patient her total lung
7 capacity is about 50 percent of what it should be.
8 Now, the other kind of lung disease is
9 obstructive disease, and it's defined in fairly
10 simple terms as difficult getting air in and out of
11 the lung. Now, we can simulate that with this by
12 blowing up the lung again.
13 Q. The jury has heard a description that one
14 is a disease of breathing in and the other is
15 breathing out?
16 A. Well, most diseases that are obstructive,
17 most -- and certainly emphysema is one of them, are
18 diseases where there is difficulty in getting air
19 out. There are some diseases of the lung where
20 there is difficulty getting it in.
21 Q. Okay. What do you want me to do?
22 A. Okay. Blow up the lung again. All full.
23 And now I'm going to pinch that main airway.
24 Okay. Now let it go.
25 Now, you notice that the lung is staying

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1 inflated. Air is escaping because you can see it's
2 slowly deflating. And what I have done is I've
3 constricted this airway.
4 Now, in a patient with emphysema that have
5 bronchitis and inflammation, and the airways get
6 smaller, but they also get destruction of the tissue
7 and the elastic recoil of the lung, because the
8 lung, as you can see, is quite elastic, as it's
9 destroyed it loses the ability to deflate.
10 Q. Let me ask you this. Inside this lung are
11 thousands or --
12 A. Millions.
13 Q. -- of little airways?
14 A. Millions. Absolutely millions.
15 Q. I told the jury that if you took this
16 upside down, it would look literally like a tree?
17 A. Right.
18 Q. The airway, and it was called a bronchial
19 tree?
20 A. That's right. As a matter of fact, I use
21 a picture of an elm tree when I teach about this,
22 that this is the complicated plumbing of the lung.
23 Q. You teach doctors?
24 A. Yes, I do.
25 Q. You teach medical doctors?

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1 A. Yes, I do.
2 Q. If you were to take all of the space of a
3 healthy lung and all the space of all those little
4 airways together, how much square footage would you
5 have?
6 A. Typically, you read this in all the text
7 books, that if you take all the surface area of this
8 lung and laid it out flat, it would be the size of a
9 tennis court. So it's huge. And it's a very clever
10 design because it allows us to have this lung with
11 an exchange surface of a tennis court all packed up
12 inside of our chest.
13 Q. All right. Doctor, you may resume your
14 seat.
15 A. Thank you.
16 Q. Now, Doctor, this morning and yesterday
17 afternoon the jury saw a series of X-ray films,
18 including a CT scan. In fact, this morning we saw a
19 CT scan in January of 19 -- CT scan, I said that
20 right, in January of 1996, and then one in December
21 of 1996.
22 And is there some science or some study or
23 some test that you can tell us about which can
24 confirm whether or not Marie Fontana, in addition to
25 the sarcoidosis, has an obstructive disease or

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1 emphysema or bronchitis or some injury to her
2 airways?
3 MR. ENGRAM: Objection, Your Honor. Lack
4 of qualification and foundation.
5 THE COURT: Overruled.
6 **A.** Well, in this case a number of tests were
7 performed. One of them was to measure how big her
8 lung is, and that's called a total lung capacity.
9 And her total lung capacity is half of what it
10 should be.
11 Now, as she expires down to the smallest
12 lung volume in her chest, she stops that expiration
13 prematurely, so her residual volume is quite high,
14 and that's unusual in a patient with restriction,
15 but is common in a patient with air-flow limitation
16 or obstruction.
17 The other test that we do in a patient
18 like this is to do simple spirometry. We measure
19 how much air you get into the lung. That's called
20 the force volume capacity, or in this case how much
21 you get out for the volume capacity, and we measure
22 how fast you can get it out.
23 Now, in the case of Ms. Fontana, her
24 amount of air that she can get out totally is
25 reduced, and because it's reduced, there's a reduced

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1 time; it takes longer for her to get the air out.
2 Now, we look at that as a ratio, and so we
3 say, well, it's abnormal; but which is worse, is it
4 the size of the lung or is it the difficulty in
5 getting it out?
6 Now, in her case, when she first was
7 tested in '86 -- or '89, sorry, that ratio was quite
8 typical of a patient who has restriction. But then
9 over the ensuing ten years, the ratio falls. It's
10 still fairly high, but the change now over those ten
11 years is more in the airway part than it is in the
12 size of the lung part.
13 But the tests that really made me think
14 that there was something more going on in this
15 patient was the diffusion capacity test.
16 BY MR. HUNTER
17 Q. When you say more going on do you mean in
18 addition to sarcoidosis?
19 A. Right. Some other process besides
20 restriction.
21 Q. In addition to that existing disease or an
22 aggravation of another disease?
23 MR. ENGRAM: Objection. Leading.
24 THE COURT: Sustained.
25 BY MR. HUNTER

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1 Q. Say it to me what you're trying to say in
2 your words?
3 A. Okay. Well, the thing that struck me as
4 odd about her lung function is this diffusing
5 capacity test. It's a test that was developed back
6 around the turn of the century, and it was a test to
7 actually disprove a theory about how oxygen was
8 actively transported into the body.
9 There was a guy named Bore, and a couple
10 by the name of Crow, and they were in a battle, a
11 scientific battle. Bore thought that the oxygen
12 went in the lung through an active process and the
13 Crows thought no, no, it's passive diffusion.
14 So they dreamed up this test to disprove
15 Dr. Bore's theory. And the test is that you have a
16 bag of gas, and in this bag of gas there is helium
17 and carbon monoxide. You take a big breath in, you
18 hold your breath of this test gas for ten seconds,
19 and then you expire and you capture a sample of the
20 gas that was in your lung.
21 And you look at the difference between the
22 helium that you inhaled and the helium you blow out,
23 and the carbon monoxide that you inhaled and blow
24 out, and you actually calculate how much carbon
25 monoxide leaves the alveolus and goes into the

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1 blood.

2 Now, the major factor that determines

3 diffusing capacity is how big your lung is, the

4 surface area of it. So in a situation where you had

5 poor restriction, you would expect the diffusing

6 capacity to go down because you're missing half your

7 lung; but when you correct for the fact that the

8 lung is small, it would be about the same.

9 And in the case of Ms. Fontana, her

10 diffusing capacity is low, but when you correct for

11 how low her lung volume is, it's still low; it's

12 much lower than that. And that's very unusual. And

13 it's not what you see in patients with sarcoid. And

14 that suggests that some other process is going on.

15 Well, one of the most common causes of a

16 diffusing capacity to go down in excess of the size

17 of the lung is emphysema. And so some other process

18 like emphysema, that's just about the only thing

19 except if there was some problem in the vascular

20 system as well -- I mean, that could be another

21 cause of that. But it's very unusual in a patient

22 with sarcoid to see this kind of reduction.

23 *Q.* Now, Doctor, we have a CT scan that the

24 jury has seen this morning and they saw again

25 yesterday of December of 1996. Did you have the

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1 actual film at one time up in Vermont?
2 A. I had a copy.
3 Q. Okay. I want you to tell the jury the
4 story of -- I told them a little bit about this in
5 opening, the story of how it came to be that
6 Dr. Petty saw the same CT scan that we have the
7 report of, and that this jury has seen today and
8 yesterday, and how that happened. Just tell us what
9 happened.
10 A. Well, he had showed me the CT scan. And
11 although I'm not a pulmonary doctor, I have seen a
12 lot of these over the years because I made a point
13 of attending pulmonary grand rounds with my clinical
14 colleagues; and so I've seen at least dozens of
15 cases of sarcoidosis being presented, but most
16 recently were three back in January.
17 Q. Let me stop you. When you say grand
18 rounds and a case of pulmonary sarcoidosis being
19 presented, what do you mean by that?
20 A. Well, in every institution that I have
21 ever worked, we have what is known as grand rounds
22 for the lung division. It happens every week. The
23 pulmonary Fellows present cases to the professors as
24 unknowns or to get their second opinion, and this is
25 how we teach, teach the Fellows to become good

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1 doctors.

2 And so cases are presented. They can

3 vary, some in the style in how they are presented,

4 but you show -- and it's done as a teaching

5 situation. So typically in Denver, for instance, we

6 would discuss at least three cases every Thursday

7 morning. In Vermont we discussed at least two cases

8 every Thursday at noon.

9 So they are presented to people, and I

10 like to go along because I'm interested in lung

11 disease. I want to keep my science very relevant.

12 And while I'm running a lung-function laboratory, I

13 want to make sure that I'm doing the very best

14 service for the doctor so I want to learn something

15 about it.

16 And so I have seen a lot of these CT

17 scans, and this looked unusual to me because

18 obviously there are changes that I'm sure you

19 probably discussed about the adenopathies that are

20 typical of sarcoidosis.

21 But there are also changes in the CT scan

22 that looked to me, anyway, like something else was

23 going on, like emphysema or something similar. But

24 since I'm not an expert, I like to present these

25 kinds of findings to my clinical colleagues.

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1 And the reason I do that as a physiologist
2 you want to associate the structure and the function
3 because it makes better in your mind how these
4 things are interrelating because the structure
5 determines the function.
6 So Dr. Petty was a advisor in Vermont. He
7 was my division chief in Colorado for over ten
8 years. And he had wanted to be invited to come and
9 visit myself, and two other people who were friends
10 of his from when we were on the faculty with him in
11 Denver. And he came through about, oh, I'd say the
12 week before last.
13 And what you do is -- he presents talks,
14 he gave two wonderful talks on things that he is
15 interested in. And at the end of my laboratory
16 meeting, I thought it would be interesting to show
17 him Ms. Fontana because I was interested in his
18 opinion. And so I presented the case to him the
19 same way we did it in Denver, and the way we did it
20 in Denver is as an unknown. It's sort of, you know,
21 it was tried to fool the professor.
22 And so you present a little bit of the
23 case. You say, "Well, this is a woman who's about
24 55, 56. She originally come from Haiti. She moved
25 to the United States when she was about 11. She

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1 lived a long time in Florida. Let's see, she had a
2 very interesting occupation, but I will tell you
3 more about that later. She's been having dyspnea on
4 exertion. She coughs. At times it's productive
5 cough. And she's being treated with Prednisone and
6 she carries a diagnose of sarcoidosis."
7 And then I put the chest CT scans on some
8 view boxes that I have in my office, kind of like
9 this one here. And I said, "What do you think?"
10 Dr. Petty is a wonderful teacher, and he
11 started to tell me about the adenopathies, and there
12 is some calcifications that you see in these
13 adenopathies that are quite characteristic of
14 sarcoid.
15 And then he said, "But notice, look,
16 there's this emphysema in the lung, and, you know,
17 this is not like what I'm used to seeing or what
18 I -- I don't remember seeing a case -- there's
19 something else going on here. There is some other
20 disease process."
21 And then he said, "Well, what does this
22 woman do?"
23 I said, "She's a flight attendant."
24 "Oh, well, she's been exposed to
25 cigarettes," and then he proceeded to tell me all

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1 about how emphysema has very characteristic CT
2 scans, and centrilobular versus panasciter, and et
3 cetera.
4 So that's exactly what happened with
5 myself and Dr. Petty. I was interested in his
6 opinion and whether he thought there was a second
7 process going on in the lung.
8 *Q.* You know, Doctor -- let me ask you this.
9 Before you showed him the film, this jury has seen a
10 videotape of a former trial. Did you know --
11 MR. ENGRAM: Objection, Your Honor.
12 MR. REILLY: Can we approach the bench?
13 THE COURT: Come over. I will listen to
14 the question over here.
15 (The following proceedings were had at
16 sidebar:)
17 MR. REILLY: Your Honor, Mr. Hunter is
18 about to ask this witness whether or not
19 Dr. Petty -- and it's either too loud or too
20 soft.
21 Mr. Hunter is about to ask this witness
22 whether or not Mr. Petty -- and he talked about
23 the fact that -- he testified --
24 First of all, that's beyond what Your
25 Honor ordered this witness to testify to. What

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1 he was supposed to testify to was to the
2 interpretation Dr. Petty made, which he has now
3 done, and also got to tell us who Dr. Petty
4 was, which he has now done.
5 But to talk about the fact that Dr. Petty
6 testified in Broin I is, Number 1, beyond the
7 agreement; Number 2, totally irrelevant; Number
8 3, brings in the Broin class action into this
9 case; Number 4, is beyond what the deposition
10 encompassed last night.
11 I think those are four great reasons why
12 this question shouldn't be asked and get
13 answered.
14 THE COURT: What was your question going
15 to be?
16 MR. HUNTER: It was going to be: Before
17 you presented it to him, did you know that
18 Dr. Petty had testified in the trial that this
19 jury has already seen the videotape from?
20 That's the way I was trying to describe
21 it, so I wouldn't say the former trial or the
22 Broin class action or anything. I mean, this
23 jury knows there's a former trial.
24 THE COURT: Where are you coming from?
25 That's the end of the question. Just a yes or

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1 no question.

2 MR. HUNTER: Yes, but I want to establish

3 to the jury that this was truly a blind

4 reading. He didn't know Dr. Petty was in this

5 case, and Petty didn't know, when he looked at

6 the film, that it was a flight attendant.

7 MR. REILLY: Your Honor, he has already --

8 THE COURT: Run that by me one more time.

9 MR. HUNTER: Okay. Dr. Irvin didn't know,

10 when he showed Petty this film, that Petty had

11 been Stanley Rosenblatt's pulmonary expert in

12 this case. And Petty didn't know, when he was

13 looking at the film, that it was the film of a

14 flight attendant.

15 THE COURT: Okay. Those two things I

16 think I'm going to allow in.

17 MR. REILLY: Your Honor --

18 THE COURT: You've just got to phrase it.

19 MR. REILLY: What the --

20 THE COURT: I think it's put in proper

21 context.

22 MR. REILLY: All it does is inject -- if

23 the purpose of this is to establish that this

24 guy gave a blind reading, that's been

25 established.

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1 Now, what you're going to do is let him
2 tell this jury that this Fellow testified in
3 this other trial for what purpose? It
4 doesn't -- it doesn't add one iota to the blind
5 reading nature of what transpired in Vermont.
6 THE COURT: I think you're making much ado
7 about nothing, and I'm going to allow those two
8 questions.
9 (The sidebar conference was concluded, and
10 the following proceedings were held in open
11 court:)
12 BY MR. HUNTER
13 Q. Did you know, when you showed the film to
14 Dr. Petty, that he had testified in the trial that
15 this jury has seen a videotape of?
16 A. No.
17 Q. Did he know when he looked at the film
18 that this was a flight attendant?
19 A. Absolutely not.
20 Q. Now, I would like you to tell the jury who
21 Dr. Petty is. I don't want you to give your opinion
22 of him from a professional standpoint, but I would
23 like you to tell the jury about him as you know him
24 professionally, what his stature is and what do you
25 know about him from a professional level?

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1 A. I started hearing Dr. Petty's name being
2 mentioned when I was a graduate student at
3 Wisconsin. He is very famous. He is considered to
4 be one of the best --
5 MR. ENGRAM: Your Honor, objection.
6 MR. REILLY: Objection.
7 THE COURT: Sustained. If he knows his
8 medical qualifications.
9 A. Well, he is at the time I then knew -- so
10 I heard about him at that point.
11 In 1980 when I was recruited to the
12 National Jewish Hospital I was given a joint
13 appointment in the pulmonary division at the
14 University of Colorado; Dr. Petty was the chief of
15 that division at that time and then for about ten
16 years after that.
17 Since he left the University of Colorado,
18 he stayed in Denver. I run into or speak to
19 Dr. Petty about once a year. So I've known the man
20 personally for over 20 years and I knew his
21 reputation dating back to '73.
22 MR. REILLY: Your Honor --
23 MR. HUNTER: Let me see if I can shortcut
24 this so we don't run afoul of the rule.
25 A. Sure.

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1 BY MR. HUNTER

2 Q. I'm going to show you Dr. Petty's
3 curriculum vitae. Could you tell us what you
4 consider to be significant in terms of his
5 professional resumé and hit those points for the
6 jury?

7 A. Well, one of the first tests you do is
8 there a lot there. He was a resident in medicine at
9 Michigan, a good school. Then he was at the
10 University of Colorado. He then was a research
11 Fellow in pulmonary disease at Colorado and he was a
12 chief resident. Now, not just everybody gets chosen
13 as a chief resident. Only the best get chosen.

14 He then was an instructor, an assistant
15 professor, and then a whole long line of teaching
16 positions that go on for at least a page.

17 And he has been a professor, chief of the
18 division, associate dean, a bunch of other things
19 that I didn't even know he was.

20 He belongs to a whole lot of professional
21 societies, Phi Beta Kappa, so that means he is
22 smart. AOA, which is a big honorary fraternity in
23 medical schools, so that means he did well in
24 medical school.

25 He belongs to all the right societies and

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1 there's at least, I don't know, it looks like about
2 20 of them there. He has been on the editorial
3 board of all the major journals and he was a senior
4 editor for Chest, which is a very influential
5 specialty journal for the practicing physician. He
6 has been on lots of committees.
7 Q. Has he written and published extensively
8 in his field?
9 A. This is the first time I've ever seen his
10 CV or first time I ever looked at it in detail. It
11 looks like he has published over 200 articles in
12 peer-reviewed literature alone.
13 Q. All right.
14 A. So -- and I happen to know --
15 THE COURT: Hold on.
16 MR. REILLY: Objection, Your Honor.
17 BY MR. HUNTER
18 Q. Can you add anything else about Dr. Petty?
19 MR. REILLY: I would object, Your Honor.
20 THE COURT: I had already stopped the
21 doctor.
22 MR. REILLY: Okay. This last question, is
23 do you know anything else about him --
24 THE COURT: I don't know what the question
25 is because I was listening to you trying to --

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1 what is your next question?
2 BY MR. HUNTER
3 Q. Can you add any additional information
4 about his professional attainments?
5 A. He is tops in his field.
6 Q. All right. Now, did you, following the
7 reading of the film, did you discuss with Dr. Petty
8 his opinions concerning exposure to secondhand smoke
9 to flight attendants?
10 MR. REILLY: Objection, Your Honor. Can
11 we approach the bench?
12 THE COURT: Yeah.
13 (The following proceedings were had at
14 sidebar:)
15 MR. REILLY: Your Honor, I have given you
16 a letter of agreement between counsel.
17 MR. HUNTER: Let me read it. If I've gone
18 afield of it I will withdraw my question.
19 MR. ENGRAM: The Court said that he be
20 permitted to take a ten-minute deposition --
21 THE COURT: One moment. A what?
22 MR. ENGRAM: The Court said that
23 Mr. Hunter would be permitted to take a
24 ten-minute deposition of Dr. Petty to cover
25 what he told Mr. --

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1 THE COURT: I'm familiar with that. I
2 thought you were going to say we would tend to
3 break, and I would agree with you.
4 MR. HUNTER: Here is what I agreed to so
5 you tell me whether I go down in flames or I
6 live on this one.
7 I agreed that I would take a deposition --
8 well, this really is as to your deposition.
9 But, anyway, about his contact with Dr. Petty.
10 I mean, I think that the event is -- I think
11 the agreement is I get to describe through this
12 witness the event --
13 THE COURT: You've done that.
14 MR. HUNTER: Okay. Well, then, I will go
15 on.
16 THE COURT: How much longer do you have?
17 MR. HUNTER: Oh, are you interested in --
18 should we take a break now?
19 THE COURT: Yeah.
20 MR. HUNTER: If we took a break now, I
21 maybe have ten minutes.
22 MR. REILLY: If we don't, it will be five?
23 MR. HUNTER: I think I got about ten
24 minutes left.
25 THE COURT: Okay. Let's finish the ten

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1 minutes, then we will take a break.
2 (The sidebar conference was concluded, and
3 the following proceedings were held in open
4 court:)
5 BY MR. HUNTER
6 Q. On Marie Fontana's first visit to
7 Dr. Coopersmith, she gives him a history of becoming
8 short of breath with exertion on flights especially
9 if it is in the smoking section; are you familiar
10 with that history?
11 A. Yes, I am. In fact, this is the same
12 history. Part of that I excerpted, that I read to
13 Dr. Petty.
14 Q. Okay. Tell us, if you can, what is it
15 that tobacco smoke does to the airways that ends up
16 physiologically in disease?
17 MR. ENGRAM: Objection, Your Honor. Lack
18 of qualification.
19 THE COURT: Overruled.
20 A. It's a big question, in the sense that --
21 BY MR. HUNTER
22 Q. Will it assist you in using an airway or a
23 depiction of one?
24 A. Not at the moment.
25 Q. Okay.

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1 A. Cigarettes are well-known to cause
2 inflammation in the lung. And the way we know that
3 is if you take a smoker, compare it to a non-smoker,
4 or have someone smoke a cigarette and then wash out
5 their lungs, basically take a hose and put it into
6 the airways and flush it out with saline and look at
7 the cells that you recover back from that, you find
8 that after exposure to cigarettes or from a smoker a
9 large number of inflammatory cells in the airway
10 wall, particularly you see a lot of what are known
11 as neutrophils. They are small, white blood cells
12 that attack infections.
13 And those neutrophils release a lot of
14 really nasty substances. They release a particular
15 proteases that grind up the lung, and in certain
16 circumstances they cause the airways to become
17 scarred, and they start to contract as a wound does,
18 as it heals.
19 And then as it thickens and narrows, the
20 airway is now narrow and it becomes more difficult
21 for the air to pass through.
22 Now, on top of that, we know that
23 cigarette smoke is a very powerful irritant and it
24 causes cough in people, and it causes the glands
25 that are in the airway wall to secrete mucus and

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1 whatnot into that airway. And that stuff inside the
2 airway also further narrows the airway and makes it
3 more difficult for air to move out.
4 Now, that's the part of exposure to
5 cigarettes that causes bronchitis.
6 In a case of emphysema, you're destroying
7 the lung so you have less air to move out, and
8 you're losing the driving force for how air gets out
9 which is the elastic recoil.
10 So it's quite complicated, but it involves
11 inflammation. It involves release of chemicals that
12 basically destroy the structure or change the
13 structure of the lung.
14 *Q.* And what is the effect of the cumulative
15 or over and over exposure of 20 years?
16 *A.* In the --
17 MR. ENGRAM: Your Honor, let me just
18 object, Your Honor, and I apologize for
19 interrupting, but this witness just gave an
20 answer about active smoking, not environmental
21 tobacco smoke, and I would object on the
22 grounds of relevancy.
23 THE COURT: Overruled.
24 MR. ENGRAM: In addition to the lack of
25 qualification.

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1 THE COURT: Overruled.
2 A. Where were we?
3 Q. Secondhand smoke being exposed to high
4 quantities for 20 years.
5 A. Well, I mean, that seems to me -- that's
6 going to be the same thing as actively smoking, or
7 perhaps worse.
8 I mean, from my reading, I know that that
9 smoke that you find in a room is full of all kinds
10 of terrible things and in higher concentrations than
11 active smoke. I mean, its sort of common sense. I
12 mean, if you have got lung disease or your lung is
13 inflamed and now you expose it to another irritant,
14 that's not good for you.
15 Q. What are the little structures that line
16 the bronchial tree?
17 A. The cilia.
18 Q. What does cigarette smoke do to cilia?
19 A. Paralyzes it. The cilia are in our large
20 airways and they beat. They beat quite rapidly.
21 And on the top of the cilia is the mucous layer.
22 Now, when we breathe in particles, soot,
23 whatnot into our lungs, it sticks on to the mucus,
24 sort of like fly paper, and then the cilia beats it
25 and moves it like an escalator up the trachea and

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1 then we swallow. That's how we get rid of it.
2 Smoking one cigarette paralyzes the cilia
3 for an hour. Patients who have been exposed to
4 cigarette smoke for years have non-functional cilia.
5 It doesn't work at all. And so a major defense
6 mechanism to clear the lung of particles is gone.
7 MR. HUNTER: Thank you, Doctor. I have no
8 further questions.
9 THE COURT: Ladies and gentlemen, while
10 you all had a chance for a break earlier, none
11 of the court personnel or myself nor the
12 attorneys had a chance for a break, so we are
13 going to take a ten-minute break again and
14 start up at 4:00.
15 (The jurors exited the courtroom.)
16 THE COURT: Doctor, during the break you
17 can talk to anyone that you want, but you
18 cannot talk about your testimony in any way,
19 shape or form with any of the attorneys or the
20 parties.
21 THE WITNESS: Yes, sir.
22 THE COURT: Now we are in recess.
23 (A recess was taken.)
24 THE COURT: Okay, ladies and gentlemen.
25 Are we ready?

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1 MR. REILLY: Just finding out who is
2 coming tomorrow, Your Honor.
3 THE COURT: Okay. Mr. Engram, am I
4 correct to assume -- you guys start talking --
5 you might take more than an hour?
6 MR. ENGRAM: Yes, Your Honor.
7 THE COURT: Okay. Then around 5:00 we
8 will stop. I will try to make a break or I
9 will tell you it's 5:00, and you will tell me
10 if it's a subject matter break.
11 MR. ENGRAM: Okay.
12 THE COURT: Yes, sir.
13 THE BAILIFF: Ready, Judge?
14 THE COURT: Yes, sir.
15 (The jurors entered the courtroom.)
16 THE COURT: Okay. Everybody have a seat,
17 please.
18 We are going to recess right around 5:00.
19 Mr. Engram, it's all yours.
20 MR. ENGRAM: Thank you, Your Honor.
21 CROSS EXAMINATION
22 BY MR. ENGRAM
23 Q. Dr. Irvin, we've met before. I'm Jonathan
24 Engram. Let's start off with your opinion in this
25 case. By your own admission your opinion in this

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1 case is based on speculation, isn't it?
2 A. Yes and no.
3 Q. Do you remember when you were deposed in
4 this case on February the 23rd of this year?
5 A. Yes, I do.
6 Q. And at the time you were deposed on
7 February the 23rd, you were sworn by a court
8 reporter to tell the truth?
9 A. Yes, I was.
10 Q. And when I asked you in your deposition --
11 do you have a copy?
12 I'd ask you to turn to Page 80 of your
13 deposition, Line 20. We were talking about your
14 expert disclosure and I asked you the question.
15 "Question: Now, in the disclosure we
16 referred to earlier, I've got it, what medical
17 condition are you referring to in that
18 disclosure?" And your answer was:
19 "Answer: Referring to her complaints of
20 shortness of breath and cough, and I'm
21 speculating that environmental tobacco smoke
22 may have caused or contributed to her
23 progression of her disease, which is in this
24 case sarcoidosis."
25 Correct?

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1 A. Did you say Page 8, Line 20?
2 Q. Page 80.
3 A. Oh, 80, sorry. I got eight.
4 MR. HUNTER: And I believe, Your Honor, he
5 has got to read the question and answer on
6 Page 83, starting at Line 7.
7 THE COURT: Okay.
8 A. Okay. So we are on Page 80 and Line 20.
9 What I was saying is that wouldn't surprise me.
10 BY MR. HUNTER
11 Q. You agree that was your testimony on
12 February 23rd of this year, don't you, sir?
13 MR. HUNTER: Judge, I believe that he
14 needs to go on to the next question and answer
15 on Page 83 to ask the witness in the context if
16 that's the testimony he gave at that time and
17 those are the answers that he gave.
18 THE COURT: Okay.
19 BY MR. ENGRAM
20 Q. I will read it again, Dr. Irvin.
21 "Now, in the disclosure that we referred
22 to earlier, I got it, what medical condition are you
23 referring to in that disclosure?"
24 And your answer was, "Referring to her
25 complaints of shortness of breath and cough. I'm

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1 speculating that environmental tobacco smoke may
2 have caused or contributed to her progression of her
3 disease which is in this case sarcoidosis."
4 A. That's correct.
5 MR. HUNTER: And on Page --
6 MR. ENGRAM: I haven't finished.
7 MR. HUNTER: Okay.
8 BY MR. ENGRAM
9 Q. Okay. You said two things there. One was
10 that you were speculating that ETS may have
11 contributed to a progression of her disease?
12 A. That's right.
13 Q. And your answer was yes?
14 A. Yes, at that time.
15 Q. Okay. Page 82, you qualified your answer
16 by saying that, "You were speculating that ETS,
17 environmental tobacco smoke, may have contributed to
18 a progression of her sarcoidosis?" And your answer
19 at that time was, "yes". Did I read that correctly?
20 A. And you're on Page 82 again? I just want
21 to make sure.
22 Q. Yes, sir. Page 82, Line 7.
23 A. Line 7. That's right. That's what I said
24 at the time.
25 Q. Okay. And Page 83, question, Line 23:

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1 "Question: Now, did" --
2 MR. HUNTER: No, no. No, start at Line 3.
3 "Can you state with reasonable medical
4 certainty," Mr. Reilly said, "It's scientific
5 certainty."
6 "Question: Reasonable scientific
7 certainty that environmental tobacco smoke, in
8 fact, caused a progress of her sarcoidosis?
9 "Answer: I would state that I think
10 there's a reasonable scientific probability
11 that environmental tobacco smoke contributed to
12 the progression of her condition."
13 BY MR. ENGRAM
14 Q. And then my question was: "Now, did
15 anywhere in the American Thoracic Society Statement
16 on Sarcoidosis mention environmental tobacco smoke
17 as a causative factor in the progression of
18 sarcoidosis?"
19 A. No.
20 Q. You said that your opinion is based on a
21 theory; isn't that correct?
22 A. At that date, yes.
23 Q. And so you said on that date --
24 A. On the 23rd, that I had a theory.
25 Q. And so your --

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1 A. Since then I have been in the library
2 reading.
3 Q. And so the speculation and theory that you
4 had in that -- in this case was that the mechanisms
5 that cause this disease are unknown, correct?
6 A. The cause of this disease is unknown in
7 terms of the factor that causes it, but there is a
8 lot known about the mechanisms that cause the
9 changes in the lung --
10 Q. Okay.
11 A. -- subsequent from the injury.
12 Q. Turn to Page 87, Line 19, please.
13 Let me back up and ask you this question:
14 Can you tell me a single medical or scientific study
15 that finds environmental tobacco smoke causes a
16 progression of sarcoidosis?
17 A. I do not know a single scientific study
18 that shows environmental tobacco smoke causes
19 sarcoidosis to progress.
20 Q. Okay. And moving on to the mechanisms of
21 this particular disease, was it not your answer that
22 in this particular disease, referring to
23 sarcoidosis, that all the mechanisms that caused --
24 that are unknown at this stage, there are theories
25 and speculations about it?

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1 A. There are, and they are based on science.
2 Q. And did you also say, when asked by me,
3 "And yours is a speculation," and your answer was:
4 "And a theory, and if I spoke to everyone that was
5 on that panel they would have a theory, and it would
6 be no better or no worse than mine"?
7 A. That's right.
8 Q. That's the scientific -- that's the level
9 of scientific proof that you rely on in coming into
10 this courtroom, sir?
11 A. No, it is not.
12 Q. Let's start by letting this jury know that
13 you are not a medical doctor; you are a Ph.D.
14 scientist; is that correct?
15 A. Yes, sir.
16 Q. You are not a doctor who specializes in
17 the practice of pulmonary medicine, correct?
18 A. I'm not a medical doctor that specializes
19 in the practice of pulmonary medicine.
20 Q. You don't take x-rays or CT scans in your
21 occupation, do you?
22 A. I have taken x-rays of experimental
23 animals in my profession.
24 Q. You don't take x-rays of people or CTs of
25 people?

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1 A. Absolutely not.
2 Q. You have not even taken a course in
3 diagnostic radiology?
4 A. I have not.
5 Q. You're not licensed to make a diagnosis
6 based on review of x-rays, are you?
7 A. I'm not.
8 Q. You cannot diagnose disease in human
9 patients, can you?
10 A. Yes, I can.
11 Q. You are licensed to diagnose disease?
12 A. I'm not licensed to do it.
13 Q. You cannot treat patients; isn't that
14 correct?
15 A. That is correct.
16 Q. Your training is in the administration and
17 interpretation of pulmonary function tests?
18 A. That's correct.
19 Q. How many pulmonary function tests did you
20 give Marie Fontana in this case?
21 A. None.
22 Q. Now, do you have any degree in chemistry?
23 A. No.
24 Q. Do you have any degree in toxicology?
25 A. No.

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1 Q. You do have a four-year Bachelor's degree
2 in biology, correct?
3 A. A minor in chemistry and psychology.
4 Q. Is my statement correct, Doctor, that you
5 have a four-year Bachelor's degree in biology?
6 A. That is correct.
7 Q. You have a Ph.D. in physiology?
8 A. That is correct.
9 Q. That was a two-year course of study?
10 A. Six years.
11 Q. You had two years of classroom course of
12 study for your physiology degree?
13 A. That is correct.
14 Q. And then you spent four years doing
15 research in writing your thesis; is that correct?
16 A. That's correct.
17 Q. Other people have completed their Ph.D. in
18 physiology in a shorter period of time, haven't
19 they?
20 A. Yes, they have.
21 Q. And you never earned a Master's degree,
22 did you?
23 A. No.
24 Q. Now, Mr. Hunter asked you on direct about
25 whether you teach medical students. Currently the

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1 only course that you're teaching is a section on
2 basic physiology; is that correct?
3 A. That's correct.
4 Q. And you're only teaching undergraduate
5 college students in that course; is that correct?
6 A. That's correct.
7 Q. And you are teaching only a section of
8 that course; you are not teaching that entire
9 course, are you?
10 A. No.
11 Q. Is that correct?
12 A. That is correct.
13 Q. And you've only been teaching in the last
14 two and a half years; isn't that correct?
15 A. That is not correct.
16 Q. When you were at the university -- when
17 you were in Denver, were you a teacher?
18 A. Yes, I was.
19 Q. You did not teach students in Denver --
20 turn to Page 47 of your deposition. Do you remember
21 my question beginning -- my question beginning at
22 Line 7:
23 "Question: Let me ask you, you said you
24 have not been in a university for a period of
25 time."

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1 And your answer was:
2 "That's right. For 18 years I was at
3 National Jewish Center for Respiratory and
4 Immunologic Disorders in Denver, and I was
5 there as a research scientist and running the
6 lung function center, and I was not a professor
7 in a university classic sense, so our education
8 formats were much less formal than they are
9 here at this university."
10 Was that your testimony on February the
11 23rd?
12 A. Yes, sir.
13 Q. You're charging for your time in this
14 case, aren't you?
15 A. Yes, sir.
16 Q. Your hourly rate --
17 A. Not all of it, but I am charging for some
18 of it.
19 Q. Your hourly rate is $300 per hour?
20 A. That's correct.
21 Q. Before your first deposition -- do you
22 know how much total time you spent in this case to
23 date?
24 A. No. I would have to sit down and figure
25 it out.

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1 Q. Okay. Let's figure it out. You spent
2 seven and a half hours before your first deposition,
3 didn't you, reviewing materials?
4 A. That sounds about right.
5 Q. You spent about four hours appearing at
6 your deposition?
7 A. The first time.
8 Q. The first time. You spent about eight
9 hours between your first deposition and your second
10 deposition; isn't that correct?
11 A. That sounds about right.
12 Q. And you spent about eight hours in
13 preparation and then attending the deposition, the
14 second deposition, on March the 12th; isn't that
15 correct?
16 A. That also sounds correct.
17 Q. How many hours did you spend after March
18 the 12th before -- in the last ten days in
19 preparation for your trial testimony?
20 A. I would hazard a guess that I've spent
21 about six hours.
22 Q. Six additional hours?
23 A. Approximately.
24 Q. Okay. And then you had to travel from
25 Vermont to Miami, didn't you?

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1 A. No. I traveled from Vermont to New
2 Orleans.
3 Q. And then you had to travel from New
4 Orleans to Miami?
5 A. That's correct.
6 Q. And did you travel yesterday?
7 A. Yes. I came from New Orleans yesterday.
8 Q. Okay. And how many hours did you spend
9 working on this case yesterday, a full day?
10 A. No.
11 Q. Between travel and preparation?
12 A. Probably only an hour yesterday.
13 Q. Only an hour to travel and prepare
14 yesterday?
15 A. Oh, longer to travel. Probably about two
16 to three hours in travel time.
17 Q. And then you've been in the courtroom all
18 day today?
19 A. No. I've been over in the offices across
20 the street reading.
21 Q. This morning and then this afternoon when
22 the flight attendants testified you've been in the
23 courtroom?
24 A. No. I've been outside.
25 Q. You weren't sitting in the back of the

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1 courtrocm when the flight attendants --
2 A. For about two minutes then I was asked to
3 leave and I have been sitting outside.
4 Q. Let's talk about your expertise in
5 sarcoidosis. You do not do research in the area of
6 sarcoidosis; isn't that correct, sir?
7 A. That is correct.
8 Q. And when you were in Denver at the
9 National Jewish Center, in spite of what Mr. Hunter
10 said, did you do any research in sarcoidosis?
11 A. No.
12 Q. You have no publications on sarcoidosis,
13 do you?
14 A. No.
15 Q. And you have no publications on
16 environmental tobacco smoke or secondhand smoke, do
17 you, sir?
18 A. No, I don't.
19 Q. And you talked about on direct a grant
20 application that was made in California that was
21 never funded, correct?
22 A. That's right.
23 Q. And, therefore, the research was never
24 conducted, correct?
25 A. That's correct.

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1 Q. And there was nothing ever published or
2 scrutiny by the peer-reviewed literature, was there?
3 A. No. But the grant was scrutinized by
4 peers.
5 Q. And then you said you took that grant
6 proposal, adopted it as your own, and made
7 application for another grant while you were in
8 Denver, correct?
9 A. That is correct.
10 Q. But the truth is, that that research was
11 never conducted?
12 A. No. I left Denver at that time.
13 Q. That's right. You never participated in
14 any research with respect to this second proposal
15 that you made because you left Denver?
16 A. That's right.
17 Q. And you did not continue that research
18 when you moved to Vermont, did you, sir?
19 A. I haven't had time.
20 Q. And so you have never completed any
21 research on the health effects of environmental
22 tobacco smoke, correct?
23 A. That's correct.
24 Q. You have never studied the chemistry of
25 environmental tobacco smoke, correct?

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1 A. Nope.
2 Q. That's not correct?
3 A. I said no, I have not studied chemistry of
4 tobacco smoke.
5 Q. Mr. Hunter paraded these books in here.
6 Does a single chapter in any of these books or any
7 book that you have ever written relate to the effect
8 of environmental tobacco smoke exposure on the
9 functioning of the lung?
10 A. Not on environmental tobacco smoke, but on
11 tobacco smoke in general, active smoking.
12 Q. You have never reviewed the United States
13 Surgeon General's 1986 report, have you, sir?
14 A. No, I have not.
15 Q. Let's talk about one of the abstracts you
16 published in 1987 in Chest. You mentioned Chest
17 earlier on your direct examination. You said it was
18 one of the leading journals in this country,
19 correct?
20 A. In pulmonary medicine, that's correct.
21 Q. Is it a journal of a specific division of
22 a group of pulmonologists?
23 A. Yes, it is.
24 Q. Which group of pulmonologists publishes
25 the journal Chest?

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1 A. The American College of Chest Physicians.
2 Q. And so you published an abstract along
3 with some coauthors in 1987 entitled Respiratory
4 Abnormalities of Hard Rock Miners at 3100 Meters,
5 correct?
6 A. That's correct.
7 Q. And this was a paper that was presented at
8 the Third International Conference on Environmental
9 Lung Disease in Montreal, Canada in October of 1986,
10 correct?
11 A. As I remember, that's correct.
12 Q. You gave us a curriculum vitae in this
13 case, didn't you?
14 A. Correct.
15 Q. And that article, Respiratory
16 Abnormalities of Hard Rock Miners at 3100 Meters --
17 which is 10,000 feet?
18 A. That's correct. It's Leadville, Colorado.
19 It's 10,000 feet up.
20 Q. That abstract is not listed on your CV in
21 your list of publications, is it?
22 A. I don't list abstracts on my CV that are
23 older than about five years.
24 Q. Okay. So you list current abstracts, but
25 you didn't list this abstract from 1987?

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1 A. No. As I told you, I don't list abstracts
2 that are older than five years.
3 Q. So the reason it's not listed on your CV
4 isn't because of the findings in that study, is it?
5 A. No sir, they are not.
6 Q. Do you remember what the finding was that
7 was reported in that abstract?
8 A. Not particularly because that was
9 Dr. Greenberg and Dr. Kries were presenting the
10 preliminary data of a study that we subsequently
11 published in 1989 as a full article in the
12 peer-reviewed literature.
13 Q. Well, when I deposed you, you remembered
14 the conclusion and result reached in the full
15 article that was published --
16 A. Yes, sir.
17 Q. -- didn't you?
18 A. Yep.
19 Q. But you didn't remember the conclusion of
20 this abstract, did you?
21 A. Nope.
22 Q. And the initial conclusion of the abstract
23 was hard rock dust exposure contributes to incidence
24 of airway obstruction independent of smoking status?
25 A. That's right.

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1 A. Yes.
2 Q. And what were his final diagnoses?
3 A. His final diagnosis is, Number 1, right
4 upper lobe fibrosis with massive hemoptysis;
5 number 2, sarcoidosis with pulmonary fibrosis.
6 Q. And fibrosis, is that a medical word for
7 scarring?
8 A. Yes, sir.
9 Q. In reviewing these medical records, did
10 you ever see the word "emphysema" mentioned?
11 A. No.
12 Q. Dr. Irvin, are you familiar with the
13 American Thoracic Society statement on sarcoidosis?
14 A. Yes, sir.
15 Q. You are a member of the American Thoracic
16 Society yourself, aren't you, sir?
17 A. Yes, sir.
18 Q. Would you agree that sarcoidosis is a
19 disease which occurs when inflamed microscopic
20 growths called granulomas grow in different organs
21 of the body?
22 A. That's a definition for that disease.
23 Q. And that these granulomas may occur in the
24 lungs, lymph nodes and eyes?
25 A. And many other organs of the body.

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1 Q. It's what they call a systemic disease,
2 correct?
3 A. In some patients, it is.
4 Q. In Ms. Fontana, was it a systemic disease?
5 A. She had certain changes in her body that
6 are consistent with systemic changes. Not
7 extensive, but there were.
8 Q. She had lymphadenopathy?
9 A. In her lungs.
10 Q. Which meant that the sarcoidosis was
11 present in her lymph nodes, correct?
12 A. That's correct.
13 Q. She had pulmonary fibrosis, sarcoidosis
14 with pulmonary fibrosis. That means lung scarring,
15 correct?
16 A. Yes, sir.
17 Q. So she had it in the lungs, she had it in
18 the lymph nodes. She had uveitis?
19 A. That's correct.
20 Q. And uveitis is a by definition of
21 sarcoidosis in the eyes, correct?
22 A. It can be, yes.
23 Q. She had kidney stones, didn't she?
24 A. I believe she did.
25 Q. And kidney stones are a complication in

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1 sarcoidosis, aren't they?
2 A. I believe they are.
3 Q. She had fungus balls growing in her lungs,
4 correct?
5 A. That's correct.
6 Q. And these fungus balls can be a
7 complication in patients with sarcoidosis, correct?
8 A. Can be, yes.
9 Q. What do granulomas in the lungs do to a
10 patient with sarcoidosis?
11 A. In mild forms of the disease the
12 granulomas in the lung fill the lung up. They
13 occupy space in the lung. In more advanced stages
14 of the disease, the granulomas are thought to
15 release chemical mediators in the lungs to cause
16 fibrotic changes in the lung.
17 Q. That cause the scar?
18 A. That cause the scar. That's the
19 restrictive disease.
20 Q. And patients with granulomas in the lungs,
21 would you expect that patient to develop shortness
22 of breath?
23 A. Yes, sir.
24 Q. Would that patient develop a cough?
25 A. Yes, sir. That would be different than

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1 the cough this patient has, because it would be a
2 cough that she would have all the time because she
3 would have -- if it was the sarcoid that was causing
4 the cough, I would have expected her to be coughing
5 all the time.
6 Q. Would you agree with this statement that
7 granulomas in the lungs can cause shortness of
8 breath and a cough, usually a dry cough?
9 A. That's correct. Can cause them.
10 Q. And in some people there can be permanent
11 scarring of the lung tissue?
12 A. In some people, yes.
13 Q. Now, this statement on sarcoidosis
14 published by the American Thoracic Society, who was
15 that statement directed to?
16 A. Statements published and approved by the
17 board of directors of the American Thoracic Society
18 are directed to other pulmonologists and to the
19 medical community at large.
20 Q. Okay.
21 A. And they are meant primarily to stipulate
22 research and investigation in the field.
23 Q. Okay. And you're familiar with the
24 Statement on Sarcoidosis, aren't you?
25 A. Yes, sir.

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1 Q. And in that Statement on Sarcoidosis, at
2 the very beginning don't they list both the things
3 doctors know and the things doctors don't know about
4 sarcoidosis?
5 A. In the opinion of that committee of
6 people, that's correct.
7 Q. You didn't serve on the committee that
8 developed the Statement of Sarcoidosis, did you?
9 A. No, I did not.
10 Q. You were on the board, though, at the time
11 that it was approved, correct?
12 A. Yes.
13 Q. So you would have approved the statement?
14 A. I voted to approve it.
15 Q. Okay. And you would agree with me that
16 there is no test available to predict disease
17 progression in patients?
18 A. In the opinion of that group, there is
19 not.
20 Q. Okay. In the opinion of the group that
21 you voted to approve, there is no test to predict
22 whether a person with sarcoidosis is going to get
23 worse?
24 A. That's correct. Although in that same
25 statement they recommend that one does measure lung

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1 Q. Smoking status had no bearing on lung
2 disease, airway obstruction, in these hard rock dust
3 miners?
4 A. That's incorrect.
5 Q. That wasn't the conclusion that you
6 reached in this abstract?
7 A. That's the conclusion we reached in that
8 abstract, but not in the paper that was published in
9 the peer-reviewed literature.
10 Q. So you changed the conclusion when you
11 published the paper later?
12 A. Yeah. And the reason is because we did a
13 different analysis, analysis that stood up to
14 peer-review.
15 Q. So your first conclusion and statistical
16 analysis you abandoned?
17 A. That's right. I didn't abandon; my
18 colleagues did.
19 Q. Your name is not on this abstract, Charles
20 G. Irvin Ph.D.?
21 A. That's me.
22 Q. Let's talk about this December 1996 CT
23 scan. When I first deposed you, Dr. Irvin, you had
24 not shown that CT scan to anyone else, had you?
25 A. Not that I recall, no.

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1 Q. And then when we resumed your deposition
2 so we could complete it, you had shown it to
3 Dr. Thomas Petty who just happened to be in Vermont
4 for two days as a visiting professor, correct?
5 A. I think I showed it to Dr. Petty after the
6 second deposition. In fact, I'm fairly sure of it.
7 Q. Well --
8 A. Let's get it out and look. I don't
9 remember.
10 Q. Well, that's --
11 A. It was either right before or right after.
12 Q. Page 12 --
13 A. I don't think that's going to be in this
14 one.
15 MR. HUNTER: Look at Page 12.
16 A. That's right. I showed it to him before I
17 did the second deposition.
18 BY MR. ENGRAM
19 Q. Now, you knew, when you showed Dr. Petty
20 the CT scan from December of 1996, that he was not a
21 radiologist, correct?
22 A. Yes, I did know that.
23 Q. Dr. Petty is a pulmonologist?
24 A. That's correct.
25 Q. Yet, you did not show him the pulmonary

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1 function test from Marie Fontana, did you?
2 A. Yes, I did. We discussed it.
3 Q. Did you show him the pulmonary function
4 test reports for Marie Fontana?
5 A. I either showed him one of the reports or
6 I discussed the findings of those reports with him.
7 I don't recall which. I had her binder with me so I
8 had them with me at the time.
9 Q. Did you show him the medical records?
10 A. No.
11 Q. You had the medical records. When you
12 talked about the binder, you're talking about this
13 binder?
14 A. Yes, sir.
15 Q. So you didn't show him any of the medical
16 records, did you?
17 A. No. We didn't have time.
18 Q. Did you show him -- did you show him this
19 pulmonary function test report? Can you see that?
20 A. Yes.
21 Q. You have in your materials a pulmonary
22 function test conducted on January the 6th, 1997,
23 correct?
24 A. Yes, sir.
25 Q. Did you show Dr. Petty the complete

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1 pulmonary function test results report from
2 January 6th, 1997?
3 A. No.
4 Q. That report showed moderate restriction,
5 correct?
6 A. That's right.
7 Q. It also showed that there was not
8 obstruction?
9 A. That's correct.
10 Q. That's not your testimony to this jury,
11 though, is it?
12 A. Absolutely not. I disagree with that
13 conclusion.
14 Q. You disagree with one of Ms. Fontana's
15 treating doctors?
16 A. Yes, sir.
17 Q. When you looked at the CT scan, you found
18 large holes; you called them blebs; is that correct?
19 A. Yes, I did.
20 Q. And you can find these large holes in
21 patients with emphysema?
22 A. Yes, sir.
23 Q. And you can find these large holes in
24 patients with sarcoidosis; isn't that correct?
25 A. That's what I've been told. I've

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1 personally never seen them.

2 Q. You personally never seen it in a patient

3 with sarcoidosis?

4 A. No, I have not personally seen large holes

5 in a CT scan of a patient with sarcoidosis.

6 Q. Now, you also said that Ms. Fontana had on

7 CT scan, bullae, correct?

8 A. That's correct.

9 Q. Is there a difference between blebs and

10 bullae; are they both large holes?

11 A. They are basically large holes. Bullae

12 refer to holes that are quite large, where blebs

13 have coalesced and made a big one.

14 Q. And you would agree that the condition you

15 saw in the CT scan is a condition that is seen in

16 patients with end-stage sarcoidosis?

17 A. No, I wouldn't, because of the 30 patients

18 or so that I've seen with severe sarcoidosis, I have

19 never seen holes like that.

20 Q. Okay. Let me refer you, then, sir, to

21 your first deposition, Page 57, Line 20.

22 A. Which now?

23 Q. Fifty-seven.

24 THE COURT: Fifty-seven.

25 A. Sorry.

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1 BY MR. ENGRAM
2 Q. Line 20 -- did you find it, sir?
3 A. Yes.
4 Q. My question: "Do you know whether the
5 condition that you saw on the CT scan is a condition
6 that is seen in patients with sarcoidosis?"
7 And your answer on February the 23rd was:
8 "Yes, I do."
9 A. Yes, I do. Because of the way --
10 Q. Line 24?
11 A. -- you phrased the question.
12 THE COURT: Let him finish the answer.
13 A. You asked the questions that I've seen in
14 these types patients with severe sarcoidosis, that
15 is, what I've read, and what I've been told by my
16 clinical colleagues. I have personally not seen it.
17 BY MR. ENGRAM
18 Q. Okay. My question to you today was, would
19 you agree that the condition you saw in the CT scan
20 is a condition that is seen in patients with
21 end-stage sarcoidosis?
22 A. And I repeat, sir, and I have read and I
23 have been told that you can see this in these
24 patients with sarcoidosis. But of the 30 CT scans
25 or so that I have seen in the course of going to

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1 grand rounds, I have never seen it before.
2 Q. Okay. Now, did you give me that answer on
3 February the 23rd, 2,001?
4 A. No, because you didn't ask me the
5 question.
6 Q. Let me continue to read, then, here
7 because my next question was -- my first question
8 was: "Do you know?"
9 And you said, "Yes."
10 And my next question is: "What is it?"
11 And your answer was: "Yes, it is, in
12 severe end-stage sarcoidosis."
13 Was that your answer?
14 A. Yes, that's what it says.
15 Q. And you don't know what causes the blebs
16 in a patient with advanced stage sarcoidosis, do
17 you?
18 A. Inflammation in the lung.
19 Q. Dr. Irvin, please turn to Page 58, sir.
20 A. Fine. I don't precisely, Mr. Engram. All
21 I know is that the mediators and chemicals released
22 from these inflammatory cells are very capable of
23 causing holes in the lung.
24 Q. Dr. Irvin, I just want to know whether
25 what you told me on February the 23rd was the truth

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1 or what you're telling me today is the truth?
2 MR. HUNTER: Judge, that's argumentative.
3 THE COURT: Sustained.
4 BY MR. ENGRAM
5 Q. Let me go back to the question at Line 9
6 on Page 58, Dr. Irvin.
7 A. Okay. Please.
8 Q. "Well, what causes the blebs in a patient
9 with sarcoidosis, advanced stage, Stage III or
10 Stage IV?"
11 And your answer, sir, would you read that?
12 A. Which line?
13 Q. Line 12.
14 A. Page 57. It says --
15 Q. Page 58.
16 A. Sorry.
17 Q. I will read the question again.
18 A. I'm sorry.
19 Q. What causes --
20 A. "I don't know" is what I said on Line 12,
21 Page 58.
22 Q. Was that your testimony on February the
23 23rd?
24 A. Yes, it is.
25 Q. That was given under oath?

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1 A. Yes, it was.
2 Q. Is that your testimony today?
3 A. No, it isn't, because I've been reading
4 since then, sir.
5 MR. HUNTER: I think the next question and
6 answer, Judge, in all fairness should be read.
7 THE COURT: Let's read it.
8 MR. ENGRAM: "So while the condition can
9 be seen in patients with emphysema or coronary
10 obstructive pulmonary disease, it can also be
11 seen in patients who don't have coronary
12 obstructive pulmonary disease; isn't that
13 correct?"
14 And your answer: "That's correct."
15 A. That's right.
16 Q. Now, Dr. Irvin, I asked you if you ever
17 saw any reference -- let me ask it this way.
18 Did you ever see any reference in the
19 medical records of Dr. Jonathan Greene,
20 Ms. Fontana's treating pulmonologist, from 1989
21 until 1995, did you see any reference in those
22 records to emphysema, COPD, or chronic bronchitis?
23 A. In the records that I reviewed that
24 Dr. Greene dictated or wrote, I did not see any
25 reference to that. There was, however, a radiology

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1 report that did.
2 Q. During the time that Dr. Greene was
3 Ms. Fontana's treating physician, you're saying
4 there was a radiology report?
5 A. There is a radiology report from, I think
6 it's 1996, that states there's COPD in the opinion
7 of the radiologist.
8 Q. Okay. And I said Dr. Greene -- do you
9 know when Dr. Greene treated Ms. Fontana?
10 A. You just told me.
11 Q. Yes. Did I say it was 1996? I said it
12 was from 1989 until 1995.
13 A. No.
14 Q. Did you review Dr. Greene's records?
15 A. Yes, I did.
16 Q. Did you review the records of Dr. Edward
17 Coopersmith, her treating pulmonologist, from 1995
18 until the present?
19 A. Yes, I did.
20 Q. Did you see any reference in any of
21 Dr. Coopersmith's records to coronary obstructive
22 pulmonary disease, COPD, emphysema or chronic
23 bronchitis?
24 A. No.
25 Q. Do you know whether the radiologists for

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1 the December '96 CT scan ever interpreted any other
2 X-rays of Ms. Fontana?
3 A. I have no knowledge of that.
4 Q. So you would be surprised to learn that
5 Dr. Gardiner, 14 days later, no longer listed COPD
6 as an impression in an X-ray report?
7 A. I don't know if I would be surprised. I
8 don't know him.
9 Q. You remember the December '96 CT scan
10 report, correct?
11 A. That's correct.
12 Q. It listed in the impressions that
13 Ms. Fontana might have tuberculosis based on his
14 interpretation of the CT scan?
15 A. That's right.
16 Q. Is it your opinion that Ms. Fontana has
17 tuberculosis?
18 A. No.
19 Q. It also listed that Ms. Fontana might have
20 histoplasmosis, correct?
21 A. That's correct.
22 Q. Is it your opinion that Ms. Fontana has
23 ever been diagnosed with histoplasmosis?
24 A. There is nothing in the record that
25 suggests that.

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1 Q. The 1996 CT scan also suggested that
2 Ms. Fontana might have lymphoma. In your opinion
3 has Ms. Fontana ever been diagnosed with lymphoma?
4 A. Not to my knowledge.
5 Q. The 1996 CT scan also listed metastatic
6 cancer as a possible impression. In your opinion
7 does Ms. Fontana have metastatic cancer?
8 A. I have no opinion about whether she does
9 or doesn't.
10 Q. Do you know, from reviewing the medical
11 records, has she ever been diagnosed with metastatic
12 cancer?
13 A. No, not in the records.
14 Q. And, finally, do you recall from the 1996
15 CT scan that one of the suggested impressions by
16 Dr. Gardiner was neoplasm?
17 A. I believe that was mentioned there as
18 well.
19 Q. And neoplasm -- another term for neoplasm
20 would be cancer?
21 A. That's correct.
22 Q. Has Ms. Fontana ever been diagnosed with
23 cancer based on your review of her medical records?
24 A. Not that I have seen in the records.
25 Q. Dr. Coopersmith, when he sent Ms. Fontana

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1 home from the hospital in December of 1996 after
2 she'd had that CT scan, did Dr. Coopersmith diagnose
3 Ms. Fontana with lymphoma, metastatic cancer,
4 tuberculosis or histoplasmosis?
5 A. I did not read that in the record.
6 Q. You didn't read the discharge summary from
7 the hospital?
8 A. I don't remember reading anything where he
9 had diagnosed her as having those conditions that
10 you just listed.
11 Q. Do you remember what Dr. Coopersmith's
12 final diagnosis was when he sent Ms. Fontana home
13 from the hospital after she had the CT scan?
14 A. I would have to review the record again.
15 MR. ENGRAM: Your Honor, excuse me a
16 moment.
17 BY MR. ENGRAM
18 Q. Do you recognize this chart as the
19 discharge summary from the date of her admission,
20 December 20, 1996, with her date of discharge,
21 December 24, '96?
22 A. It's hard to read, but I'll accept that.
23 Q. Is it easier to read the final diagnoses
24 by Dr. Coopersmith, Ms. Fontana's treating lung
25 doctor?

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1 function, as an example, periodically to map the
2 progression of the disease.
3 Q. Okay. Somewhere else in that statement
4 document they recommend pulmonary function testing?
5 A. Right.
6 Q. This theory that you have, that's not
7 referenced in this statement, is it?
8 A. No, it isn't.
9 Q. And down here toward the bottom, this is
10 the order that they appear in the statement; isn't
11 that correct?
12 A. I would have to compare it, but I believe
13 for sure.
14 Q. And one of the other things doctors don't
15 know, doctors and scientists -- because you just
16 don't have to be a doctor to be a member of the
17 American Thoracic Society, do you?
18 A. No.
19 Q. You're proof that scientists can be
20 members?
21 A. That's right.
22 Q. One of the things that doctors and
23 scientists don't know is the mechanisms that result
24 in persistent disease; isn't that correct?
25 A. That's correct. "Mechanisms" is the

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1 operational word.
2 Q. Okay. And you would agree that
3 Ms. Fontana has a persistent form of sarcoidosis,
4 correct?
5 A. It's very clear that she does.
6 Q. It's so persistent that she requires a
7 lung transplant, correct?
8 A. That I would disagree with. I believe
9 that the reason she is now waiting a transplant is
10 in part due to the sarcoidosis and in part due to
11 the other changes in her lung.
12 Q. Can I hand you this book and ask you to
13 show me where in the medical records that theory or
14 speculation can be found?
15 A. It's not there, sir.
16 Q. It's not there in the medical records?
17 A. That's correct, it isn't.
18 Q. It's not there and those medical records
19 include the very medical records of the lung
20 transplant team here in Miami at Jackson Memorial
21 Hospital, correct?
22 A. That's correct.
23 Q. Are you saying they don't know what they
24 are doing over at Jackson?
25 A. No, sir, I'm not saying that.

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1 Q. In this Statement on Sarcoidosis, what we
2 know, this came from the American Thoracic Society
3 Statement on Sarcoidosis, too, didn't it?
4 A. Yes, it did.
5 Q. And we know what the symptoms are and
6 we've been over those, and Ms. Fontana has many of
7 those symptoms, right?
8 A. That she does.
9 Q. And we know how to make a diagnosis of
10 sarcoidosis, correct?
11 A. That's correct.
12 Q. We note that steroids are effective in the
13 short-term?
14 A. That's what this committee says. A lot of
15 people disagree with that.
16 Q. Well, we know that for Ms. Fontana they
17 weren't effective in the long-term, were they?
18 A. No, they weren't.
19 Q. We know --
20 A. That's why that statement goes on to say
21 that we need to develop much better treatments for
22 this disease.
23 Q. We know about the incidence or how often
24 and how prevalent the disease occurs?
25 A. That's what that statement says. I would

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1 tend to disagree with that, because the National
2 Institutes of Health have instituted a multi-center
3 research project, where they are collecting registry
4 program patients with sarcoidosis to learn more
5 about the incidence and prevalence of this disease.
6 Q. When was the disease sarcoidosis first
7 diagnosed, not in Ms. Fontana, but the first case of
8 sarcoidosis reported?
9 A. A very long time ago.
10 Q. Over 100 years ago, wasn't it?
11 A. That's right.
12 Q. And scientists and doctors have been
13 studying sarcoidosis for over 100 years?
14 A. That is correct.
15 Q. And let's continue through the things that
16 we know because I don't want to leave anything out
17 here. We know that some genetic factors alter how
18 the disease is expressed, correct?
19 A. Some people believe so. This group did.
20 Q. Okay. This group that you approved?
21 A. That's right.
22 Q. And we know the immunologic
23 characteristics of the initial onset of the disease?
24 A. Correct.
25 We know some of the immunological

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1 characteristics, not all of them.
2 Q. Can you show me anywhere in the Statement
3 of sarcoidosis -- do you remember how many pages it
4 is?
5 A. Not off the top of my head.
6 Q. Can you show me anywhere in the Statement
7 on Sarcoidosis that it says environmental tobacco
8 smoke causes a progression of sarcoidosis?
9 A. There is not one word in that document
10 about cigarette smoke at all.
11 Q. You say there is not one word?
12 A. No, sir.
13 Q. There is not one -- I would agree with you
14 that there is not one word in that document about
15 environmental tobacco smoke, but I disagree with
16 you, Dr. Petty -- I mean, Dr. Irvin, about tobacco
17 smoke.
18 MR. ENGRAM: Your Honor, can I approach
19 the witness?
20 THE COURT: Sure.
21 BY MR. ENGRAM
22 Q. Let me refer you to the highlighted
23 portion at the top of Page 199 -- excuse me, 1,999.
24 A. "Sarcoidosis appears to occur more
25 commonly in nonsmokers than smokers."

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1 Q. That means that people who smoke don't get
2 sarcoidosis and people -- did I say it right?
3 MR. CHUMBLEY: Yes.
4 BY MR. ENGRAM
5 Q. And people that don't smoke do get
6 sarcoidosis, correct?
7 A. No, that's not correct. People who smoke
8 get the disease. I think you carefully lectured me
9 in our first deposition that in epidemiologic
10 studies finding an association between smoking and
11 the disease does not necessarily link to causality.
12 Moreover, there are at least two studies
13 published in the United States -- three, that I can
14 think of, that do not show an association between
15 smoking and the lack of seeing sarcoidosis.
16 Q. Now, there are numbers after that
17 statement. Sarcoidosis appears to occur more
18 commonly in nonsmokers than in smokers, correct?
19 A. Uh-huh.
20 Q. And the American Thoracic Society, this
21 group of physicians and scientists in the United
22 States that has gone to this effort to publish this
23 Statement on Sarcoidosis to promote research and
24 further study of this, has said sarcoidosis appears
25 to occur more commonly in nonsmokers than in

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1 smokers?
2 A. That's not what you said. You said does
3 it protect against getting the disease.
4 Q. I didn't say protect. I did not use the
5 word "protect," Dr. Irvin.
6 You would agree sarcoidosis appears to
7 occur more commonly in nonsmokers than in smokers?
8 A. Some studies show that.
9 Q. And, in fact, they cite here those studies
10 that show it, correct?
11 A. Yes, they do.
12 Q. They cite a study, Number 96, by Douglas,
13 "Sarcoidosis: A disorder commoner in nonsmokers,"
14 published in Thorax. Do you recognize Thorax as an
15 authoritative journal?
16 A. Absolutely.
17 Q. Number 97 --
18 A. Before you go on, did you look that
19 article up and read it?
20 Q. Yes, sir.
21 Number 97: "Is sarcoidosis related to
22 exposure to pets or housing conditions," in
23 Sarcoidosis.
24 There's a whole article about sarcoidosis,
25 is there not -- I mean, there is a whole journal

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1 called SarcoIdosis, isn't there?
2 A. Yes, there is.
3 Q. And Number 98: "Voluntary smoking and
4 pulmonary sarcoidosis: The effect of cigarette
5 smoking on prevalent clinical manifestations,
6 alveolitis, and evolution of the disease,"
7 published, again, in Thorax.
8 That was the basis for the statement of
9 the committee's Statement on Sarcoidosis that you
10 approved, correct?
11 A. That's right.
12 MR. ENGRAM: Your Honor, this would be a
13 good point to take a break.
14 THE COURT: Okay.
15 Ladies and gentlemen, it is 5:00 and I
16 think it is appropriate to recess for the
17 evening.
18 Remember my instructions. I don't think I
19 saw anything in the paper this morning about
20 this trial. So there's probably not going to
21 be anything in the paper for awhile. They like
22 to do that at the start of a trial and then
23 they wait until the very end when the result
24 comes in. So remember what my instructions
25 are.

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1 Enjoy the evening and if you could come
2 back tomorrow at 9:45, second floor.
3 Todd.
4 THE BAILIFF: Yes, sir.
5 THE COURT: Okay.
6 (The jurors exited the courtroom.)
7 MR. REILLY: Your Honor, it's probably
8 good to give the witness the admonition --
9 THE COURT: I have already done it. He
10 now knows it and I assume he is going to follow
11 that instruction.
12 THE WITNESS: Would you repeat the
13 instruction?
14 THE COURT: You can talk to anybody you
15 want about anything except for this trial.
16 THE WITNESS: Yes, sir.
17 THE COURT: Or actually anything not
18 dealing with your testimony you can talk about,
19 but dealing with your testimony, you cannot
20 talk about it.
21 THE WITNESS: Okay.
22 MR. McCARRON: Judge, while we still have
23 the attorneys, because of the way things are
24 moving along, I think we may, if we get to it
25 tomorrow, depending on how long Mr. Irvin is on

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1 the stand, have Ms. Fontana here to testify as
2 much as she can.
3 THE COURT: Okay.
4 MR. ENGRAM: She wasn't listed on the
5 48-hour notice, Your Honor.
6 MR. McCARRON: Ms. Fontana's medical
7 condition, she has been having some medical
8 problems earlier this week. She is starting to
9 feel better, and before it gets to a point
10 where she can't come in because of her medical
11 condition -- I think that these gentlemen have
12 been prepared probably for months to
13 cross-examine Ms. Fontana, so I don't think
14 that there is any prejudice. They knew she was
15 going to testify and, you know, I apologize for
16 not getting to them earlier because of her
17 medical condition.
18 MR. HUNTER: I might say this, Judge. We
19 are winding down, getting close to the end of
20 our presentation, and I'm going to call the
21 witnesses that I have as -- I don't know, I
22 mean --
23 THE COURT: Who else do you have to do
24 besides Ms. Fontana?
25 MR. ENGRAM: Your Honor, they have

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1 disclosed --
2 MR. REILLY: Wait. Wait.
3 MR. McCARRON: We have some videos still
4 left, Your Honor. We have videos of Dr. Burns,
5 Dr. Richmond, Dr. Hammond, Dr. Breeden.
6 MR. HUNTER: I will go back and do this.
7 I will go back and try to put in the priority
8 of when I'm going to call every single witness
9 that I'm going to call until the end of this
10 case.
11 THE COURT: And give them a call this
12 evening and tell them.
13 MR. HUNTER: Yes. Then I'm going to call
14 them and put them on until I finish, and that
15 will be probably Monday or Tuesday.
16 MR. REILLY: Your Honor, we want to know
17 who it is that is coming tomorrow so we can
18 prepare for who is really coming tomorrow.
19 MR. HUNTER: You can be prepared for
20 Dr. Breeden, as I indicated, and Judy Adams,
21 and Gail -- I may have a before-and-after
22 witness named Gail Pehling, and I have to check
23 on Pakulsky, Judge. I'm coming very close to
24 the end of my case, so I'm going to start
25 calling these witnesses and finish my case

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1 soon.

2 MR. GERSON: And our client.

3 MR. HUNTER: Now we have a problem with

4 the client.

5 MR. REILLY: Your Honor, we understand her

6 condition, and we are not trying to be

7 difficult about her condition, but we've now --

8 I think we have now heard all the rest of the

9 witnesses for the remainder of the case.

10 MR. HUNTER: I think so. I have to go

11 back to check my record, but I don't think --

12 let me say this.

13 MR. REILLY: Other than some lay

14 witnesses, we are not going to see any more

15 experts of any kind, I presume? Let's just get

16 it out. Just tell us.

17 MR. HUNTER: I don't think so.

18 MR. GERSON: Well, some doctors.

19 MR. HUNTER: Well, Judge, let me just say

20 this. I'm talking about -- I'm getting

21 sidetracked on my client. I don't expect to

22 call her tomorrow, but I may have to if I run

23 out of witnesses. I'm just giving them

24 forewarning. But when she does testify, this

25 is going to be my problem. She can talk for

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1 about an hour, I would say.
2 MR. GERSON: Not even. Thirty, 40
3 minutes.
4 THE COURT: We will pay close attention.
5 Any time it looks like she needs to rest, we
6 are going to give her a rest period.
7 MR. GERSON: What we would like to do is
8 to be able to kind of bifurcate or even
9 trifurcate her testimony. Let her testify a
10 little bit, then go to some other --
11 THE COURT: How long does she need for a
12 rest period? We can fill it.
13 MR. GERSON: A longer time. So what we
14 would like to do is maybe put her on and have
15 her talk about some issues, and then go to a
16 videotape that, you know, have all the rulings
17 on, and then bring her back at a later time in
18 the day and --
19 THE COURT: I don't mind that procedure.
20 MR. GERSON: -- and bring it out that way.
21 THE COURT: That would even give them more
22 time to prepare their cross-examination, if
23 it's not already prepared, at least the
24 majority of it.
25 MR. ENGRAM: What I would hate to do, Your

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1 Honor, is have her testify on Friday and not
2 have any cross-examination of her, and then her
3 not come back for several days because of her
4 health.
5 MR. HUNTER: I wouldn't do that. I mean,
6 I can't control her health, but if -- what I
7 was thinking is, and I would give them the
8 opportunity to do this if I call her: Put her
9 on for a period of time while she is still
10 strong, and let them cross her on what she
11 said, and maybe she will be able to continue.
12 I mean, I have sat in her living room,
13 carried on a discussion with her for an hour
14 and a half, two hours. But I have the feeling
15 that when she's out of the house -- see, we
16 have to -- she has a limited supply of oxygen
17 that we can transfer.
18 THE COURT: Our juror Mr. Werner needed a
19 mask so maybe that would cause problems for her
20 as well.
21 MR. REILLY: Your Honor, could we think
22 about that just a little bit and make a
23 suggestion to you, as to whether or not we
24 would want to do this intermittent cross or --
25 THE COURT: Absolutely.

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1 MR. REILLY: Because I'm not sure that --
2 not having seen Ms. Fontana and not knowing if
3 she's really coming, there's a lot of ifs in
4 this program.
5 THE COURT: I'm not going to hold you to
6 that one. Well, I guess I probably shouldn't
7 say what the confusion was in the last line of
8 the cross-examination, so I won't. Let me take
9 it off this.
10 Anything else?
11 MR. HUNTER: Nothing further, Your Honor.
12 THE COURT: Okay.
13 MR. REILLY: Thank you, Your Honor.
14 THE COURT: See you all tomorrow at 10:00.
15 (Court was adjourned at 5:10 p.m.)
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